1	Major Milestones Timeline
2	Facilities Evaluation
3	Site Evaluations Summary
4	Educational Visioning Summary Document
5	Educational Programming Document
6	Introduction Document
7	Space Summary Documents
8	Options Considered Document
9	Evaluation Matrix
10	Draft of Cost Analysis Options
11	Cost of New School vs. Renovation Document
12	Review of Major Milestones

Educational Program

summary of educational visioning sessions

Educational Visioning is a process which brings together a large cross-section of stakeholders, residents, and educators to develop learning concepts, goals and values which result in a comprehensive, long-term planning tool for the school district. When a new project is being considered or proposed, educational visioning provides the cornerstone of all educational planning, and it defines the nature of school operations, function, and opportunities for the future. It literally shapes school and community relations for decades to come.

Educational Visioning in Abington was facilitated by David Stephen of New Vista Design. David holds a Bachelor in Architecture degree from Rhode Island School of Design and a Masters in Education from Lesley College. As an educator and licensed architect, David has collaborated with many pioneering architectural firms, playing a key role in the architectural design of over 40 new and redesigned elementary, middle, and high schools and has 20 years of experience partnering with some of the field's visionaries, working with schools nationwide to imagine, develop, and implement innovative school programs. At New Vista Design, David has helped districts, schools, and educators develop student-centered and inquiry-based curricula and programs.

Educational Visioning is a catalyst for generating ideas regarding how the school might best be designed to foster 21st Century education while simultaneously incorporating the needs of the entire community. It enables the architects to develop building plans which are consistent with the needs of the Town of Abington; incorporating the educational, community, organizational, and functional goals and values articulated in the visioning sessions.

The Educational Visioning process included an evaluation of the high school and middle school educational delivery and facilities today and a projection of the future for both. The Educational Visioning report contains the result of that evaluation. Some examples of barriers to effective educational delivery in the current Abington High School and Frolio Middle School facilities include the lack of flexible learning spaces for educational projects that require team work, inadequate science labs, the absence of teacher centers for collaboration, a lack of support for applied learning and student presentations, a poorly organized high school building that deters interdisciplinary or collaborative learning, and a Frolio Middle School which does not support modern middle school programming and is grossly undersized.

The Educational Visioning and Programming sessions included the following:

- April 8, 2013: full day session with faculty, staff, and administration
- April 25, 2013: 3-hour session with Building Committee and faculty, staff, administration APS
- April 29, 2013: 2-hour session with administrators – existing school configurations
- May 16, 2013: 3-hour session with Building Committee and faculty, staff, administration APS
- May 29, 2013: 3-hour session with faculty, staff, and administration APS. Floor Plan Bubble Diagram
- June 13, 2013: 2-hour session with Building Committee. Floor Plan Bubble Diagram

The following individuals are recognized for their commitment and involvement in this extensive and comprehensive process. Their input and guidance proved invaluable and will become a key component in shaping the future of the Town of Abington and Abington Public Schools.

Name	Representing	E-mail Address
Peter Schafer	Superintendent of Schools	peterschafer@abingtonps.org
Felicia Moschella	Assistant Superintendent	feliciamoschella@abingtonps.org
Jannette Leary	Abington School Committee	jannetteleary@abingtonps.org
Joe Leavell	Business Department Head	josephleavell@abingtonps.org
Dympna Thomas	Central Office	dympnathomas@abingtonps.org
Roseanne Kurposka	Frolio Principal	roseannekurposka@abingtonps.org
Teresa Sullivan	High School Principal	teresasullivan@abingtonps.org
Jessica Sullivan	High School Assistant Principal	jessicamsullivan@abingtonps.org
Nichole Rich	Center School Principal	nicholerich@abingtonps.org
Danielle M. Kay	Beaver Brook Elementary A.P.	daniellekay@abingtonps.org
Matt MacCurtain	Woodsdale Principal	matthewmaccurtain@abingtonps.org
Kristin Ferioli	High School Director of Guidance	kristinferioli@abingtonps.org
Diane Salvetti	Grades 7-12 Science Department Chair	dianesalvetti@abingtonps.org
Meg Doherty	Grades 7-12 Math Department Chair	megdoherty@abingtonps.org
Jason Scott	Grades 7-12 Social Studies Chair	jasonscott@abingtonps.org
John Mahoney	Art Director	johnmahoney@abingtonps.org
Adrienne Whalen	Social Studies Curriculum	adriennewhalen@abingtonps.org
Diane Benbenck	ELA Coordinator / Title I	dianebenbenck@abingtonps.org
Marilyn Weber	Beaver Brook Elementary Principal	marilynweber@abingtonps.org
Kristen Grady	Grade 6 Teacher / Math Coordinator	kristengrady@abingtonps.org
Peter Serino	High School Social Studies Teacher / Athletic Director	peterserino@abingtonps.org
Liz Gonsalves	High School/Middle ELA	elizabethgonsalves@abingtonps.org
Kathleen Bloomstein	Elementary Science Coordinator; Grades 7 and 8 Science Teacher	kathleenbloomstein@abingtonps.org
Patricia Grabowski	Grades 7-12 Foreign Language Department	patriciagrabowski@abingtonps.org
Joyce Harrington	Director of Music Grades K-12	joyceharrington@abingtonps.org
Aaron Hyre	I.T.	aaronhyre@abingtonps.org

Name	Representing	E-mail Address
David Stephen	New Vista Design	david@newvistadesign.net
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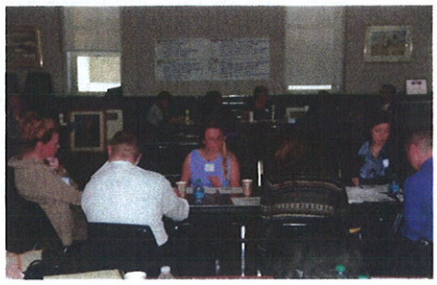
Jim Jordan	Ai3 Architects, LLC	jordan@ai3architects.com
Scott Dunlap	Ai3 Architects, LLC	dunlap@ai3architects.com
Troy Randall	Ai3 Architects, LLC	randall@ai3architects.com
Mary Mahoney	KBA	mmahoney@kbaarchitects.com

SESSION 1 – April 8, 2013

The Agenda for the April 8, 2013 session included the following:

TIME	Activity	Purpose
8:00 - 8:30	Socializing	
8:30 – 9:00	Workshop Goals and Introductions	Priority Goals for the New Facility
9:00 – 9:45	Brainstorming Session	Abington Strengths, Challenges, Opportunities and Goals
9:45 – 10:45	21st Century Design Principles and Patterns	Discuss and identify changing paradigms in Education
11:00 – 11:40	21st Century Learning Goals	Small Group discussion and priority learning goals
11:40 – 12:30	Abington Guiding Principles for Design	Small group discussion between desired program features and Guiding Principles and priorities to support design
1:15 – 1:45	Abington 21st Century Design Patterns	Small group exploration of connections between Guiding Principles for Design and the desired Design Patterns that will best support them
1:45 – 2:15	Blue Sky Ideas	Individual thought regarding a list of no-holds-barred design ideas for the new facility to expand thinking about what is possible and desirable

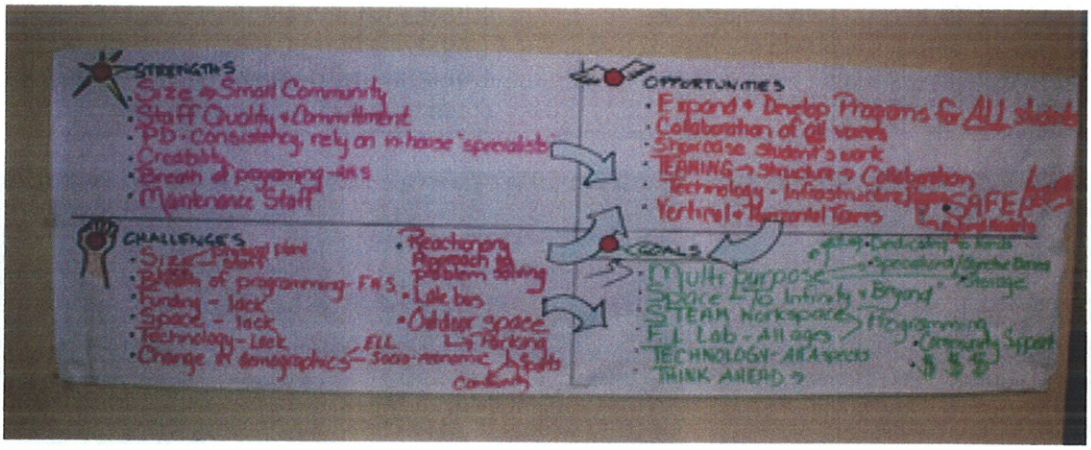


Subsequent to a review of workshop goals and introductions, the participants were divided into three groups to begin to discuss and document what they believed to be the Strengths, Challenges, Opportunities, and Goals within the Abington Public Schools. The groups first documented their brainstorming on paper and then shared their thoughts with all of the participants. The following is a summary of their discussions and presentation:

GROUP 1:

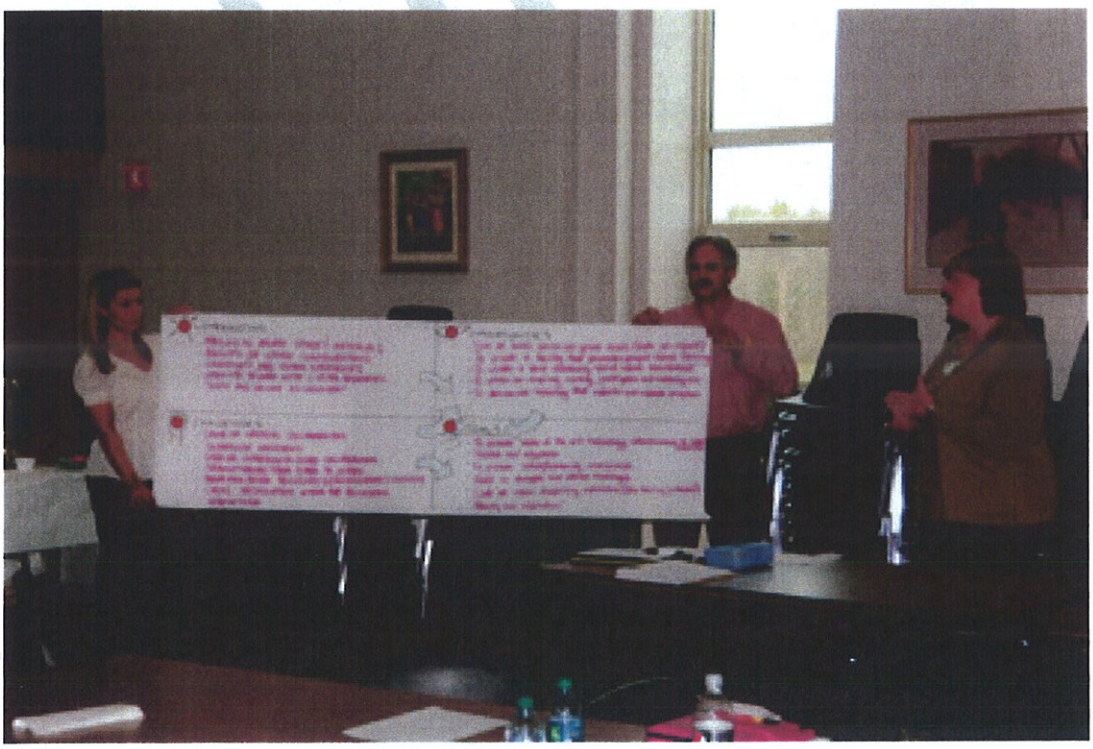
Strengths: • Size – small community • Staff quality & commitment • PD – consistency, rely on in-house "specialists" • Credibility • Breath of programming – AHS • Maintenance staff	**Opportunities:** • Expand & develop programs for all students • Collaboration of all voices • Showcase students' work • Teaming – structure – collaboration • Technology – infrastructure, program – hybrid models • Vertical & horizontal teams • Safe/security

Challenges:
• Size
  ○ Physical plant
  ○ Staff
• Lack of programming – FMS
• Funding – lack
• Space – lack
• Technology – lack
• Change in demographics
  ○ ELL
  ○ Socioeconomic
• Reactionary approach to problem solving
• Late bus
• Outdoor space
  ○ Parking
  ○ Sports
  ○ Community
	Goals:
	• Multipurpose, as well as:
	  ○ Dedicated to needs
	  ○ Specialized / objective based
	  ○ Storage
	• Space – "to infinity and beyond"
	• STEAM workspace – programming
	• F.L. Lab – all ages – programming
	• Technology – all aspects
	• Think ahead
	• Community support
	• $$$



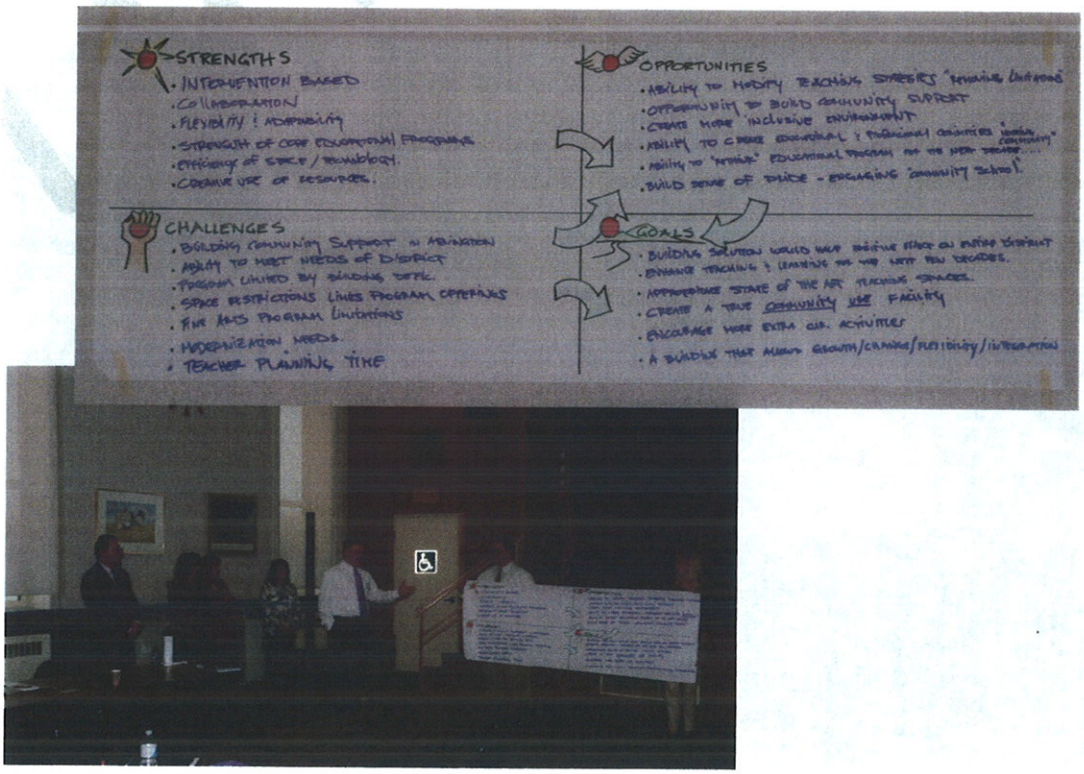
GROUP 2:

Strengths: • Ability to adapt space & materials • Agility of grade configurations • Creativity and coping strategies • Ability to work with limited resources • Safe and secure environment	**Opportunities:** • Look at needs across all grade levels (make an impact) • To create a facility that promotes project based learning • To create a more community based school environment • To create an inspiring, inviting, prestigious and nurturing environment • To incorporate technology that supports and expands programs
Challenges: • Lack of vertical collaboration • Schedule variations • Lack of interdisciplinary collaboration • Transitioning from school to school • Poor and aging buildings (organization & condition) • Lacks inspiration within the building structure	**Goals:** • To promote state of the art technology infrastructure to support instruction • Flexible and adaptable • To promote school/community relationships • Build on strengths and address challenges • Look at cross disciplinary instruction (how facility promotes) • Beauty and inspiration



GROUP 3:

Strengths: • Intervention based • Collaboration • Flexibility & adaptability • Strength of core educational programs • Efficiency of space/ technology • Creative use of resources	**Opportunities:** • Ability to modify teaching strategies "removing limitations" • Opportunity to build community support • Create more inclusive environment • Ability to create educational & professional committees "hosting community" • Ability to "rethink" educational program for the next decade • Build sense of pride – engaging "community school"
Challenges: • Building community support in Abington • Ability to meet needs of district • Program limited by building deficiencies • Space restrictions limits program offerings • Fine arts program limitations • Modernization needs • Teacher planning time	**Goals:** • Building solution would have positive effect on entire district • Enhance teaching & learning for the next few decades • Appropriate state of the art teaching spaces • Create a true community use facility • Encourage more extra curriculum activities • A building that allows growth/change/ flexibility/integration

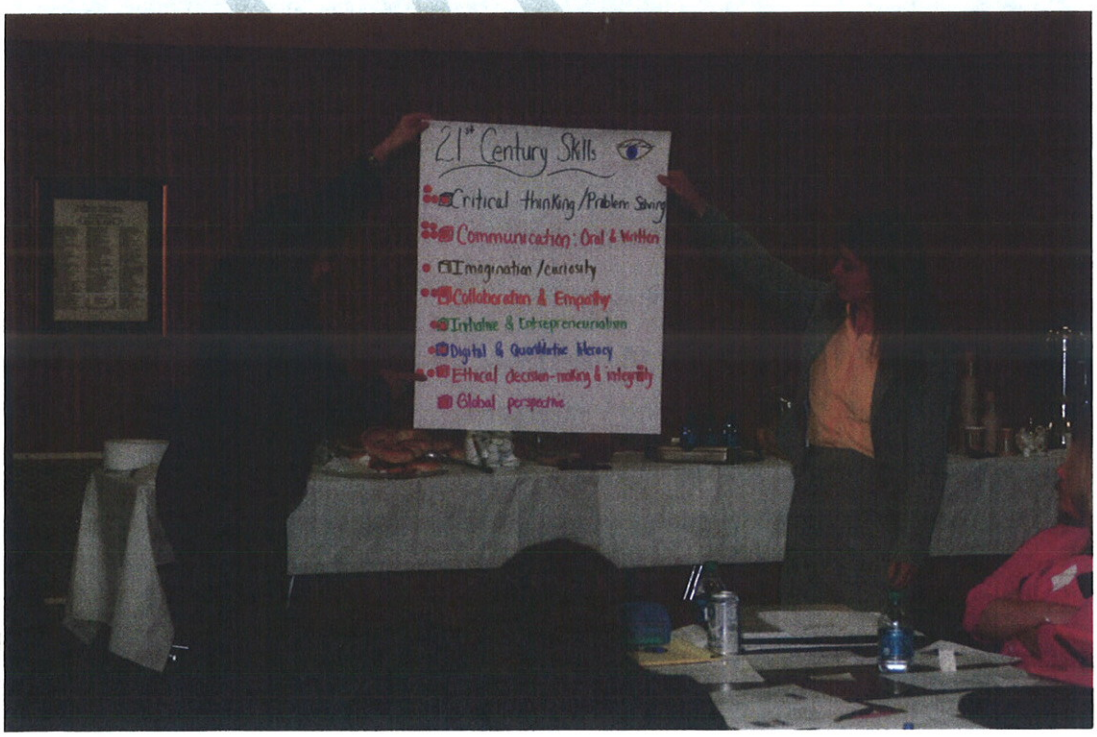


David Stephen then continued his presentation and slide show on 21st Century Design Principles and Patterns. The contents of his entire presentation were made available on the Abington Building Committee website subsequent to the presentation.

The participants were divided into three groups to brainstorm the critical 21st Century Skills required for students. They were asked to establish Priority Goals in delivering such education...all as part of developing Abington's 21st Century Learning Goals. The groups were encouraged to take their time discussing both current and future practices, and to consider information presented by David regarding successful trends across the country. The following is a summary of the identified "21st Century Skills" and the "Priority Learning Goals" aka Abington's 21st Century Learning Goals:

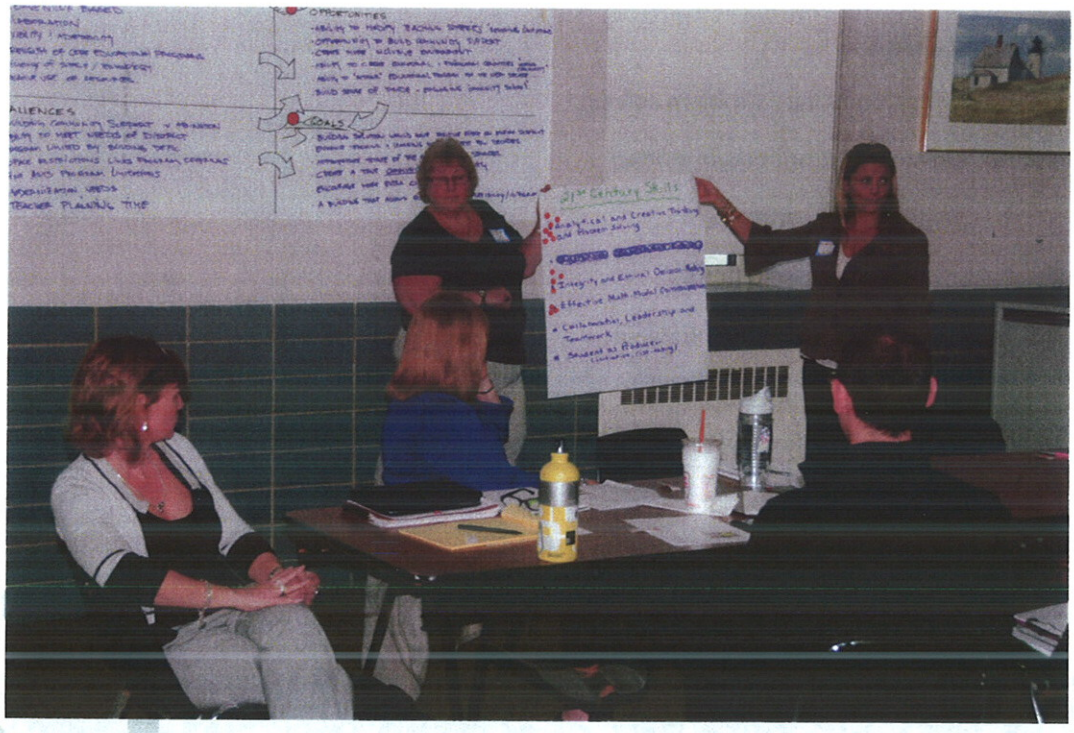
21st Century Skills

- Critical thinking / problem solving IIII
- Communication: oral & written IIII
- Imagination / curiosity I
- Collaboration & empathy III
- Initiative & entrepreneurialism II
- Digital & quantitative literacy II
- Ethical decision – making & integrity III
- Global perspective I



21st Century Skills

- Analytical and creative thinking and problem solving
- Integrity and ethical decision-making
- Effective Multi-modal communication
- Collaboration, Leadership and Teamwork
- Student as producer (initiative, risk-taking)



Priority Goals – Group 1

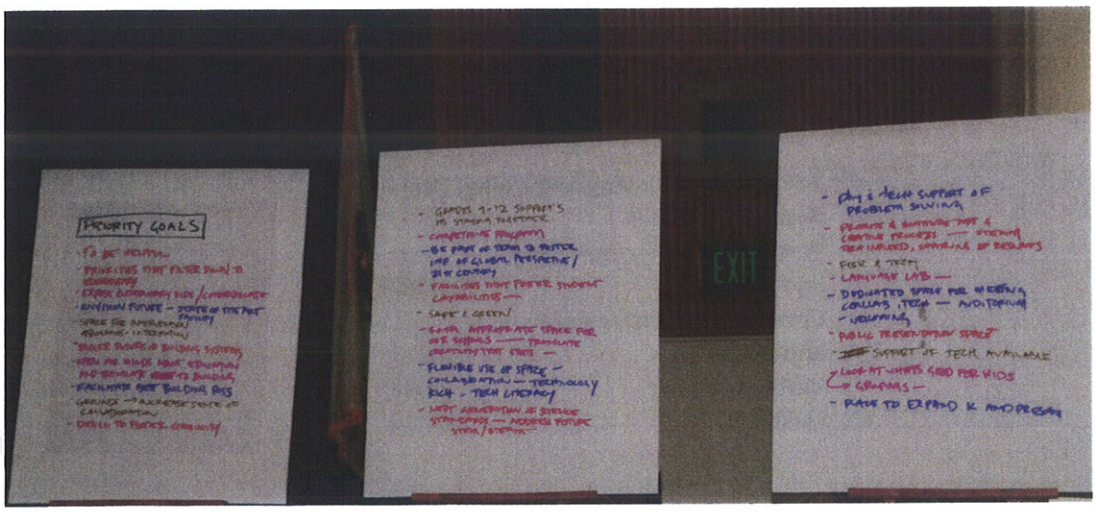
- To be helpful
- Priorities that filter down to elementary
- Expose elementary kids / communicate
- Envision future – state of the art facility
- Space for intervention programs – integration
- Bigger picture of building systems
- Open our minds about education and translate to building
- Facilitate best building possible
- Grounds – increase sense of collaboration
- Design to foster community

Priority Goals – Group 2

- Grades 7-12 supports HS staying together
- Competitive program
- Be part of team to foster importance of global perspective / 21st Century
- Facilities that foster student capabilities
- Safe & green
- SOTA appropriate space for our schools – translate creativity that exists
- Flexible use of space – collaboration – technology rich – tech literacy
- Next generation of science standards – address future stem/steam

Priority Goals – Group 3

- Physical & tech support of problem solving
- Promote and enhance art & creative process – steam tech infused, sharing of resources
- Flex & tech
- Language lab
- Dedicated space for meeting collaborative, tech – auditorium – welcoming
- Public presentation space
- Support of tech available
- Look at what's good for kids – groupings
- Place to expand Kindergarten and Preschool



After much discussion and additional presentation from David, four groups were created for the purpose of brainstorming the most important guiding principles in the development of a 21st Century school environment. Each of the groups presented their summary of proposed guiding principles, and then all participants were allowed to vote on their preference among the guiding principles. The following is a summary of the suggested guiding principles, and the votes achieved by each:

Guiding Principles – Group 1

- School as a center of the community: community resources IIIIIIIIIIIIIIII
- Adaptable space IIIIIIII
- Small school community / large school pride
- Applied learning space / project based learning space II
- 21st Century thinking and doing IIIIII
- Hallways as an instructional tool (no lockers in the hallway) I
    - Transparency of instruction

Guiding Principles – Group 2

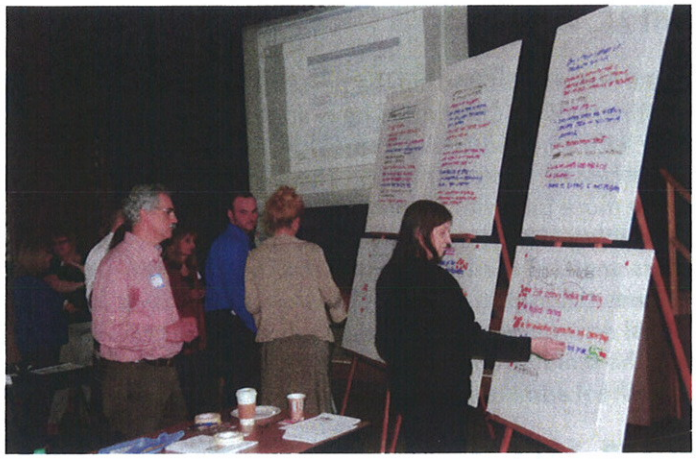
- Focused intellectual engagement IIIIIIIIIIIIII
- Visible learning I
- Real world applications IIIIII
- Creativity
- Personalization & ownership IIIIIII
- Community I

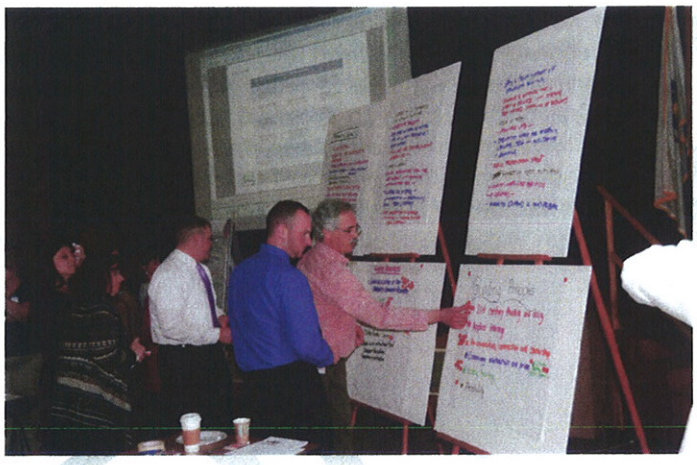
Guiding Principles – Group 3

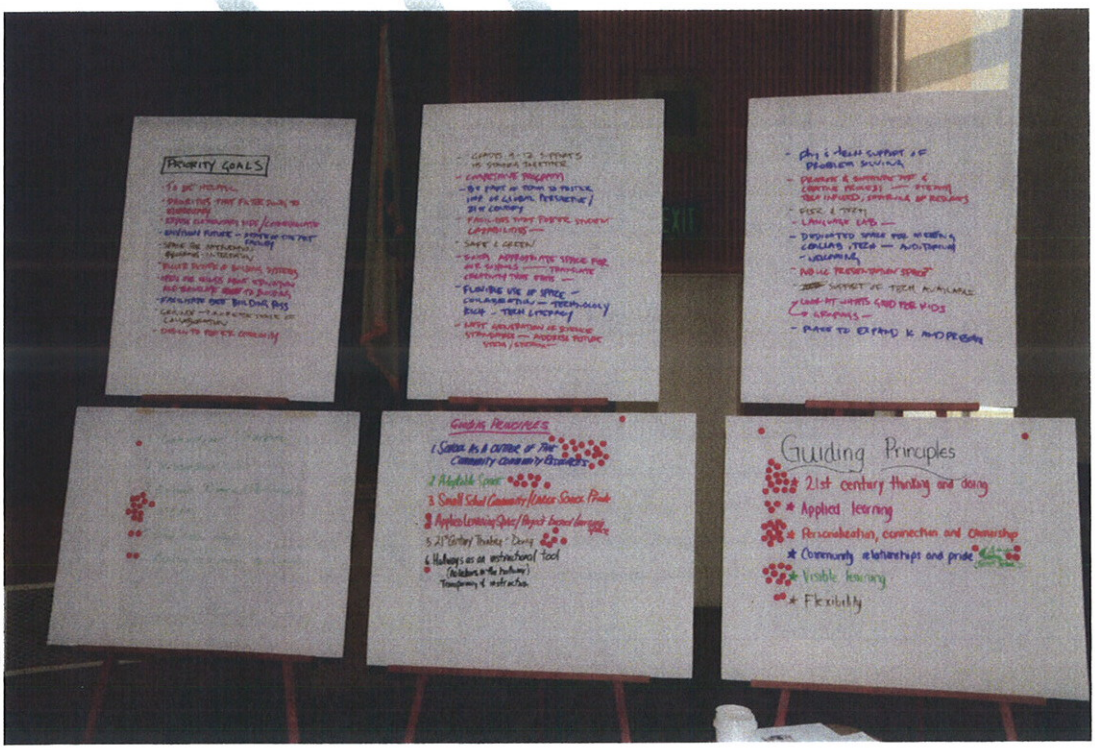
- Community and collaboration I
- Relationships
- Community resource / partnership
- STEAM IIIIIIIIIII
- Whole campus learning II
- Building as a teaching tool (sustainability) II

Guiding Principles – Group 4

- 21st Century thinking and doing IIIIIIIIIIII
- Applied learning III
- Personalization, connection and ownership IIIIIIIIII
- Community relationships and pride IIII
- Visible learning IIIIIIIII
- Flexibility II





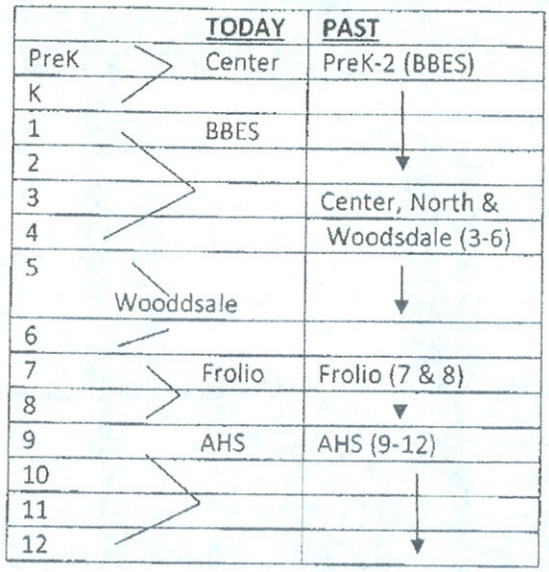

PRIORITY GOALS
Guiding Principles
1 School is a center of the Community Community Resources
2 Affordable Space
3 Small School Community/Center School Feel
4 Applied Learning Space/Project Based Learning Space
5 21st Century Thinking - Doing
6 Hallways as an instructional Tool
Guiding Principles
21st century thinking and doing
Applied learning
Personalization, connection and Ownership
Community relationships and pride
Visible learning
Flexibility

SESSION 2 – April 25, 2013

The success of the initial one-day session led the design team and the Abington Public Schools to propose that the entire Building Committee have an opportunity to be part of a condensed version of session one, with an opportunity to provide input on many of the thoughts, ideas, and goals that were discussed in session one. The content of the slide presentation was also changed to include more information on the transformation of education over the past decades, including the video "Shift Happens". Although several of the Building Committee members are educators, many of them represent other facets of the professional community and the presentation was tailored to provide these members some insight on the evolving 21st Century educational environment. The presentation and discussion included thoughtful input and insight from the Building Committee members, and left them eager to continue the process by joining the school administration and staff in the next scheduled visioning session.

SESSION 3 – April 29, 2013

In order to become more familiar with the various school facilities within the Town of Abington, the design team requested a meeting with the school administrators to review past, current, and future use of each of the educational facilities within the Abington school district. Although the focus of the feasibility study is to program a middle school and high school facility, the integration of the lower grade levels into a comprehensive solution is also critically important for the Town. Therefore an understanding of the facilities currently serving grades PK-6 is important to future discussions of a comprehensive solution. After much discussion, the following summary diagram was generated by the school administration to summarize past and current use.



SESSION 4 – May 16, 2013

As part of continuing to develop the concepts and ideas formulated in prior sessions, session number 4 focused on the development of organizational diagrams and "idea diagrams" for various areas of the building and program. The majority of the session was dedicated to this task, with the Agenda as follows:

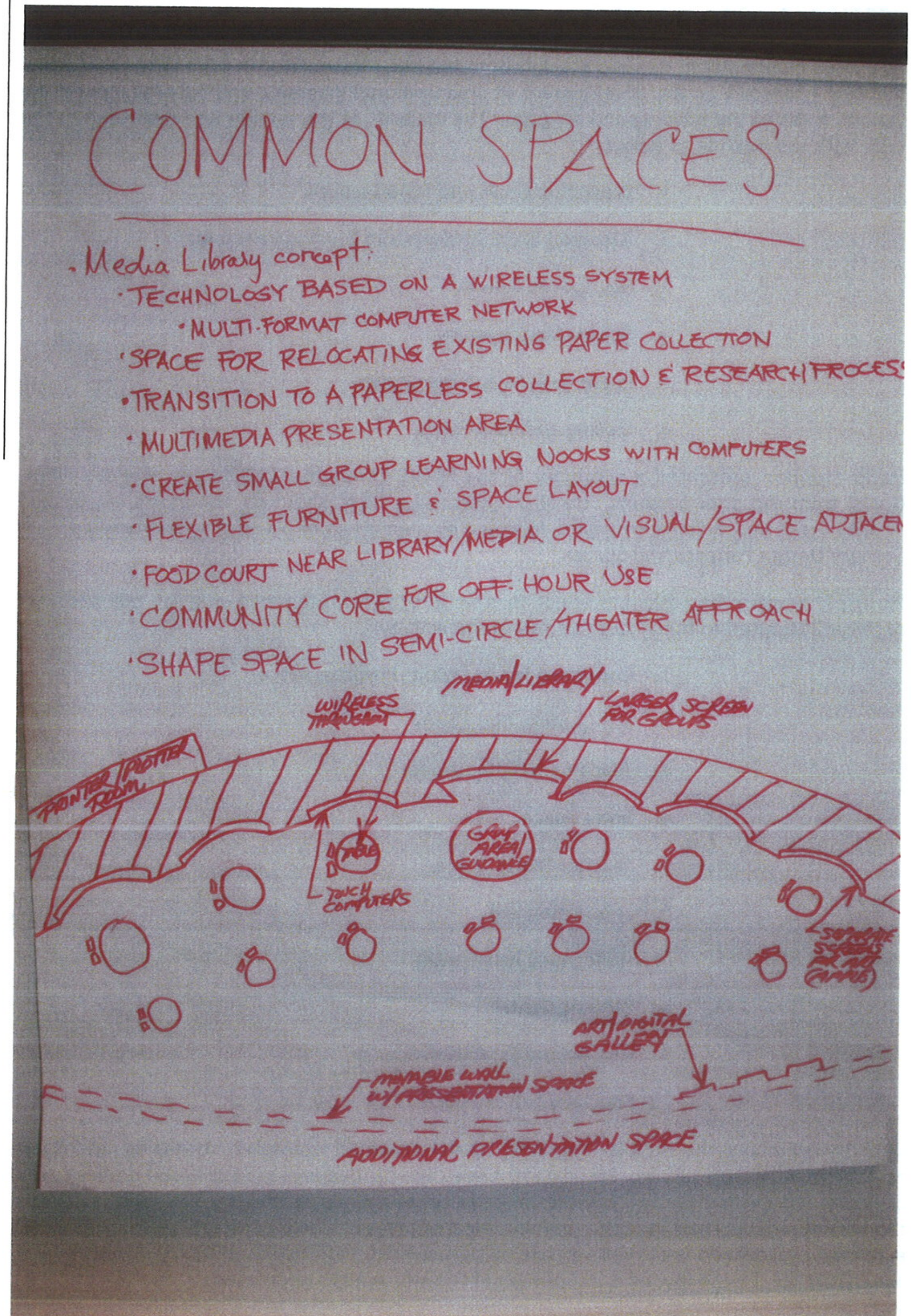
1. Workshop Goals and Introductions
2. Abington SCOG Analysis and Guiding Principles
3. Key Spaces Activity
4. Bubble Diagramming
5. Presentations and Discussion
6. Closing and Next Steps

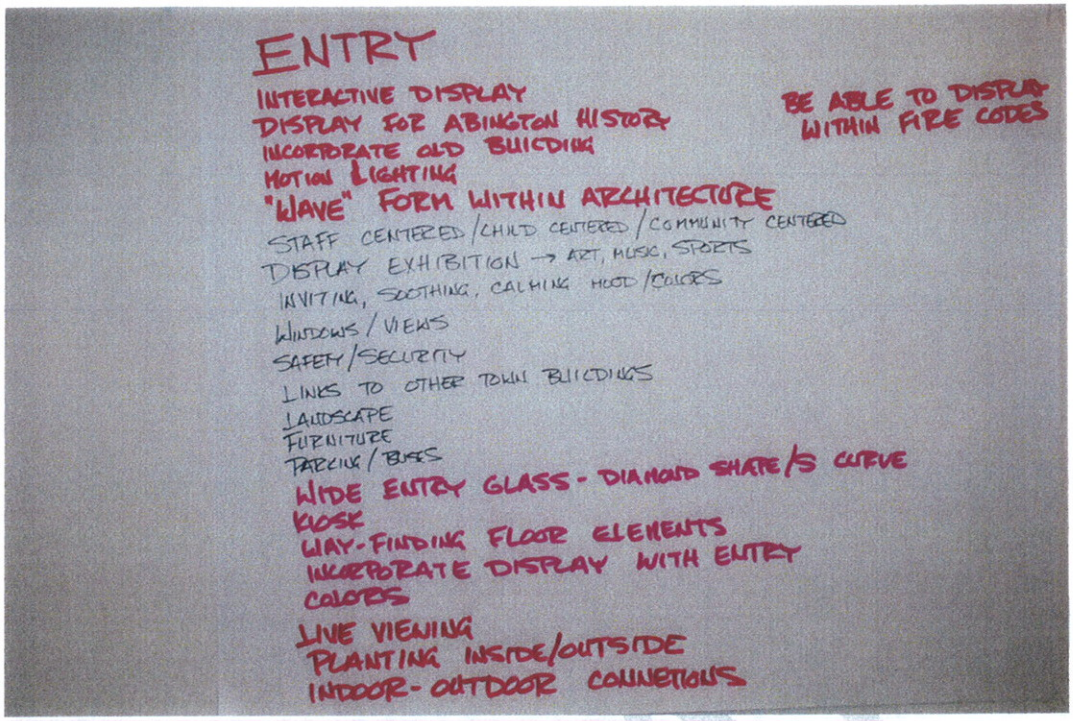
David Stephen presented a summary of the SCOG (Strengths, Challenges, Opportunities, Goals) from the prior sessions. He also presented a "Refresher" on Abington's established Priority Goals and Guiding Principles, followed by a summary of his prior presentation on 21st Century Design Patterns and Spaces.

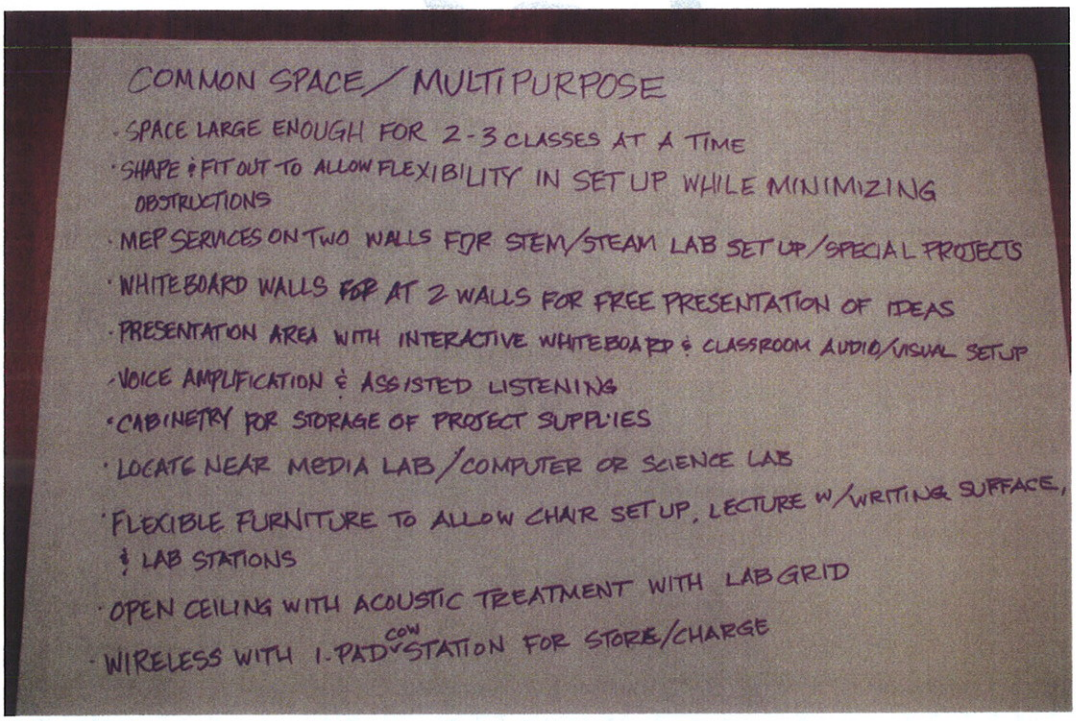
Participants were then asked to select an area of focus from the following list, but were not necessarily limited to these areas as part of the activity:

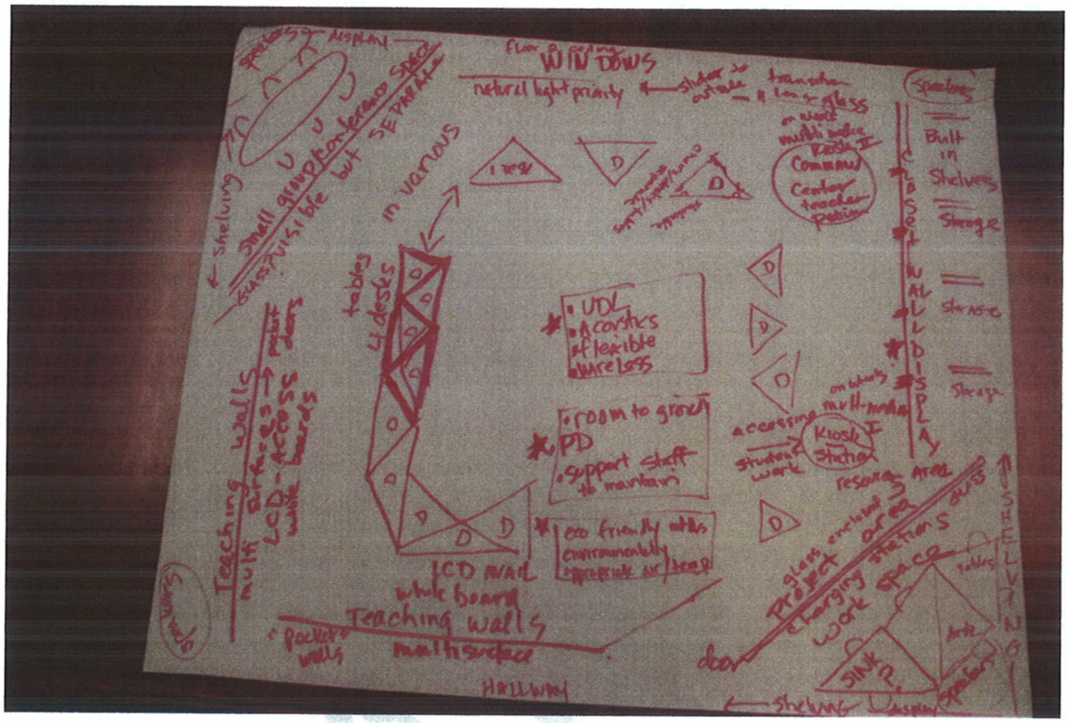
1. Commons Space / Multi-Purpose Space
2. 21st Century Classroom
3. Teaching Neighborhood
4. Entry Space
5. Teacher Works Space
6. Fabrication Lab
7. Performing Arts Center
8. Athletic Center
9. Display and Exhibition Spaces
10. Specialty Lab or Space

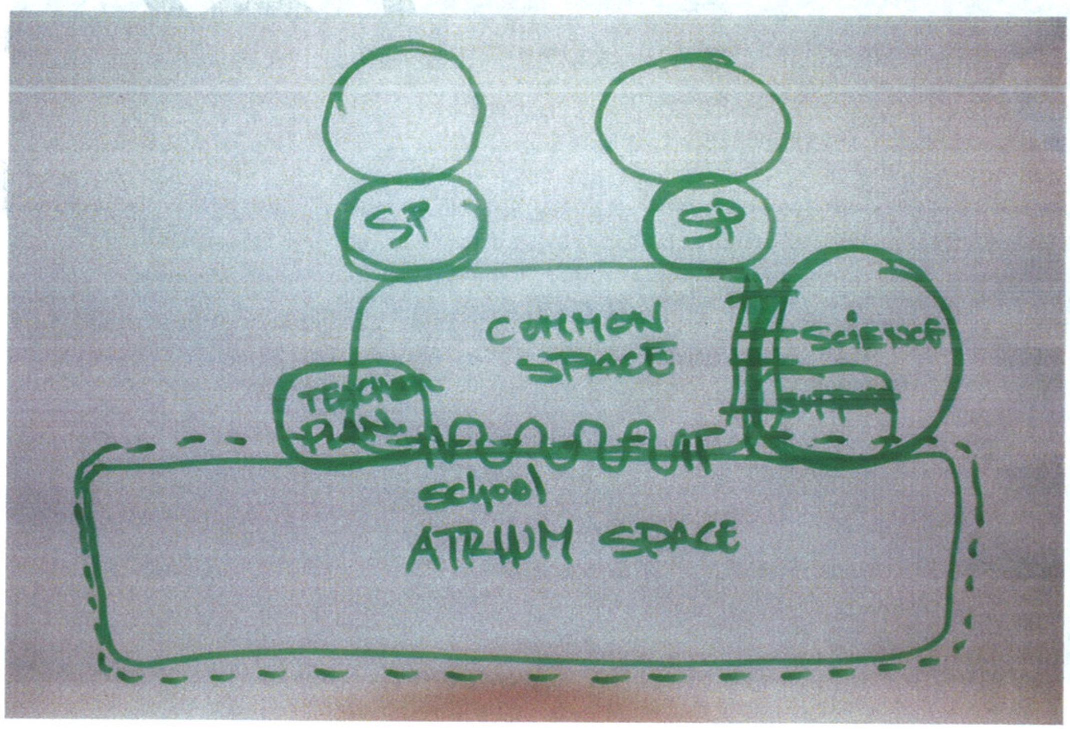
Prior to beginning the Bubble Diagrams, David presented examples, strategies, and goals associated with the exercise. Participants were then divided into groups based on their area of focus and given time to generate multiple diagrams, spreadsheets, lists, and notations targeted at sharing their thoughts on their selected program areas. The groups then provided extended presentations of their work to all participants, with opportunity for questions and input from all. The following is a summary of the information generated.

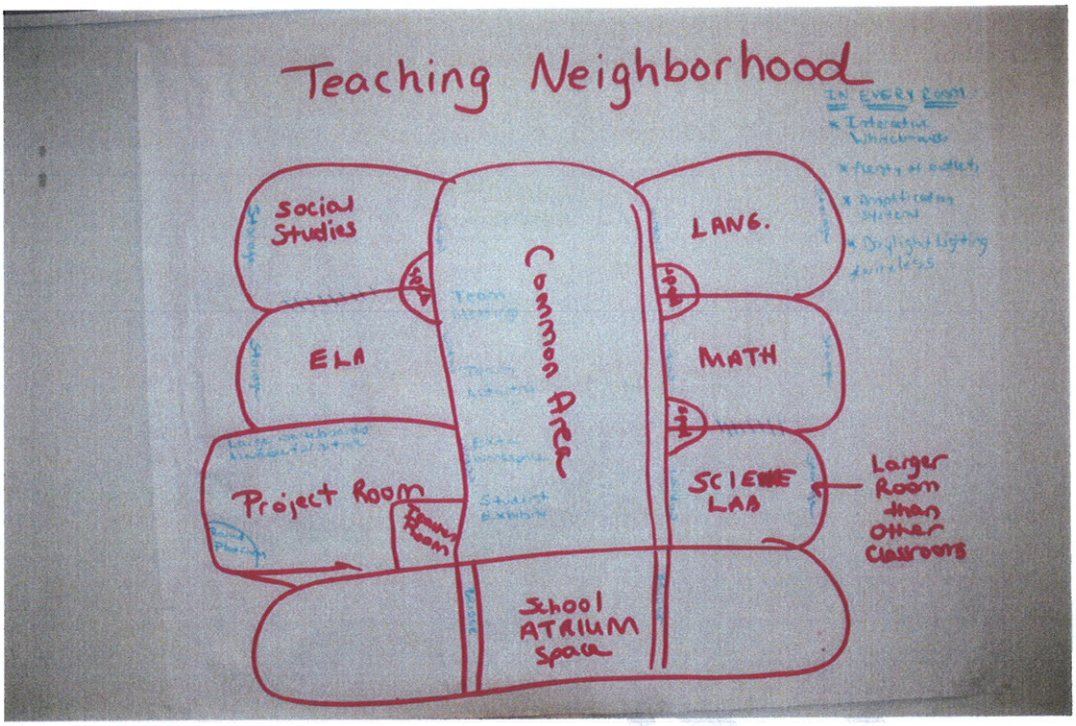

COMMON SPACES
· Media Library concept:
· TECHNOLOGY BASED ON A WIRELESS SYSTEM
· MULTI-FORMAT COMPUTER NETWORK
· SPACE FOR RELOCATING EXISTING PAPER COLLECTION
· TRANSITION TO A PAPERLESS COLLECTION & RESEARCH PROCES
· MULTIMEDIA PRESENTATION AREA
· CREATE SMALL GROUP LEARNING NOOKS WITH COMPUTERS
· FLEXIBLE FURNITURE & SPACE LAYOUT
· FOOD COURT NEAR LIBRARY/MEDIA OR VISUAL/SPACE ADJACEN
· COMMUNITY CORE FOR OFF-HOUR USE
· SHAPE SPACE IN SEMI-CIRCLE/THEATER APPROACH
MEDIA/LIBRARY
WIRELESS
LARGER SCREEN FOR GROUPS
PRINTER/PLOTTER ROOM
TABLE
GROUP AREA/ GUIDANCE
TOUCH COMPUTERS
ART/DIGITAL GALLERY
MOVABLE WALL W/ PRESENTATION SPACE
ADDITIONAL PRESENTATION SPACE

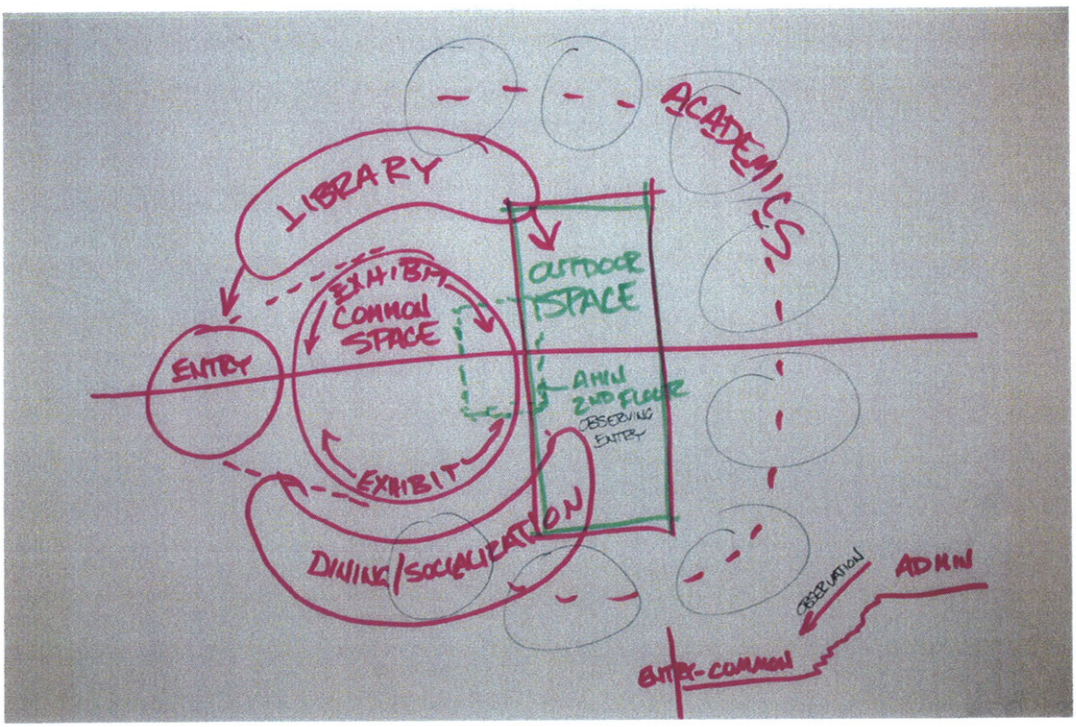

ENTRY
INTERACTIVE DISPLAY
DISPLAY FOR ABINGTON HISTORY
INCORPORATE OLD BUILDING
MOTION LIGHTING
"WAVE" FORM WITHIN ARCHITECTURE
BE ABLE TO DISPLAY WITHIN FIRE CODES
STAFF CENTERED / CHILD CENTERED / COMMUNITY CENTERED
DISPLAY EXHIBITION → ART, MUSIC, SPORTS
INVITING, SOOTHING, CALMING MOOD / COLORS
WINDOWS / VIEWS
SAFETY / SECURITY
LINKS TO OTHER TOWN BUILDINGS
LANDSCAPE
FURNITURE
PARKING / BUSES
WIDE ENTRY GLASS - DIAMOND SHAPE / S CURVE
KIOSK
WAY-FINDING FLOOR ELEMENTS
INCORPORATE DISPLAY WITH ENTRY
COLORS
LIVE VIEWING
PLANTING INSIDE/OUTSIDE
INDOOR-OUTDOOR CONNECTIONS

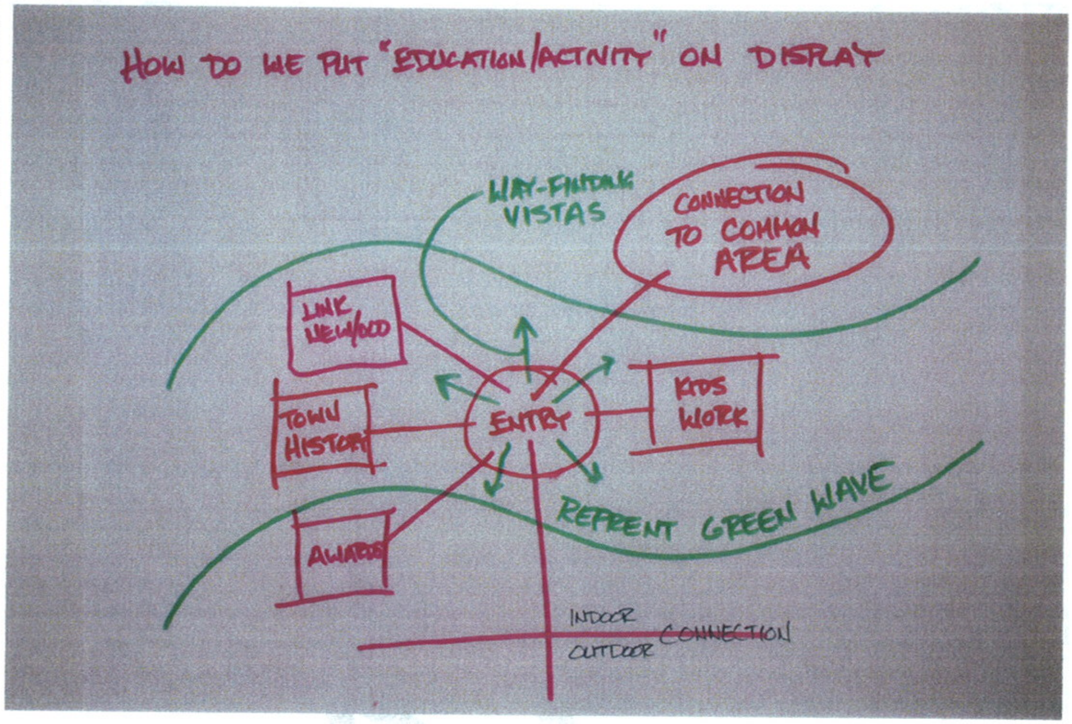

COMMON SPACE / MULTIPURPOSE
· SPACE LARGE ENOUGH FOR 2-3 CLASSES AT A TIME
· SHAPE & FIT OUT TO ALLOW FLEXIBILITY IN SET UP WHILE MINIMIZING OBSTRUCTIONS
· MEP SERVICES ON TWO WALLS FOR STEM/STEAM LAB SET UP/SPECIAL PROJECTS
· WHITEBOARD WALLS FOR AT 2 WALLS FOR FREE PRESENTATION OF IDEAS
· PRESENTATION AREA WITH INTERACTIVE WHITEBOARD & CLASSROOM AUDIO/VISUAL SETUP
· VOICE AMPLIFICATION & ASSISTED LISTENING
· CABINETRY FOR STORAGE OF PROJECT SUPPLIES
· LOCATE NEAR MEDIA LAB / COMPUTER OR SCIENCE LAB
· FLEXIBLE FURNITURE TO ALLOW CHAIR SETUP, LECTURE W/WRITING SURFACE, & LAB STATIONS
· OPEN CEILING WITH ACOUSTIC TREATMENT WITH LAB GRID
· WIRELESS WITH 1-PAD COW STATION FOR STORE/CHARGE

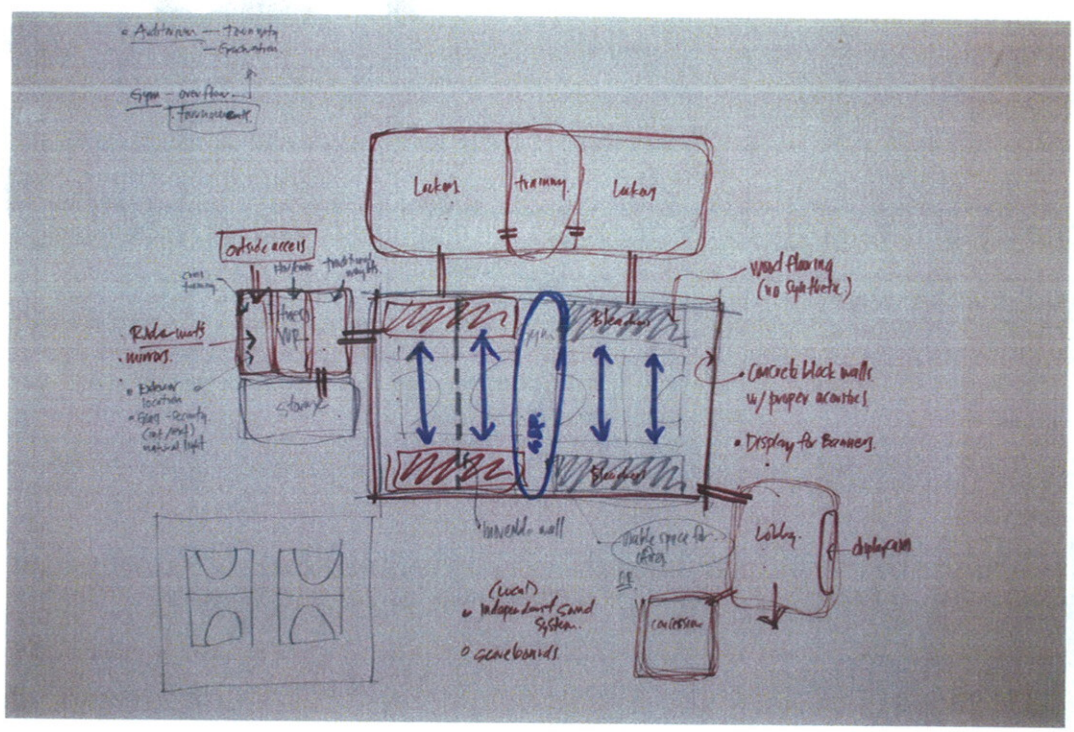

WINDOWS
natural light priority
Built in Shelves
Storage
UDL
room to grow
PD
support staff to maintain
Kiosk station
Teaching walls
LCD WALL
white board
Teaching walls
Project area
charging stations
work space
SINK
door
HALLWAY


SP
SP
COMMON SPACE
SCIENCE
TEACHER PLAN
school
ATRIUM SPACE


Teaching Neighborhood
IN EVERY Room
Social Studies
Common Area
LANG.
ELA
MATH
Project Room
SCIENCE LAB
Larger Room than other classrooms
School ATRIUM Space


ACADEMICS
LIBRARY
OUTDOOR SPACE
EXHIBIT
COMMON SPACE
ENTRY
ADMIN 2ND FLOOR
OBSERVING ENTRY
EXHIBIT
DINING/SOCIALIZATION
OBSERVATION
ADMIN
ENTRY-COMMON


HOW DO WE PUT "EDUCATION/ACTIVITY" ON DISPLAY
WAY-FINDING VISTAS
CONNECTION TO COMMON AREA
LINK NEW/OLD
TOWN HISTORY
ENTRY
KIDS WORK
AWARDS
REPRENT GREEN WAVE
INDOOR
OUTDOOR
CONNECTION


Lockers
training
Lockers
outside access
wood flooring (no synthetic)
Concrete block walls w/ proper acoustics
Display for Banners
Lobby
scoreboards

Although some of the groups focused on the details of an individual space, most of the groups focused on combining the thoughts and ideas of prior sessions related to 21st Century Skills, Priority Goals, and Guiding Principles into specific organizational and functional strategies that address the design and layout of a 21st Century educational facility for the Town of Abington. The following is a summary of the design concepts that were inherent in the bubble diagrams and form a large part of the vision and educational programming strategy for the Abington Public Schools.

Integration of Topics and Teams – The old traditional approach of segregating subjects by department is detrimental to cross-discipline instruction within the educational environment. In order for teachers to be able to facilitate the blending of multiple disciplines of academic instruction, teams must be organized to include multiple subject classrooms into a "Teaching Neighborhood", which includes four general classrooms and a dedicated science classroom. These neighborhoods should also include a dedicated project room for the development of hands-on, project based learning among team members. Although each neighborhood may not require a teacher planning area, teacher planning and work areas should be an integral part of each team, allowing appropriate space for teachers to collaborate on student assignments, progress, and cross-discipline instruction. Although organized for efficient interaction within the team, these teams must share a common connection with other teams and be able to casually and easily integrate themselves within the remaining school environment. This "common connection space" may be a central atrium, expanded corridor, or other open circulation element.

Flexible Project and Instructional Space – Very few modern business or scientific spaces segregate instruction from application. The modern comprehensive middle school and high school environment must be a flexible space which accommodates both instruction and application. The spaces which are dedicated to project based learning should be highly integrated to the remaining academic classrooms and/or environment.

Entry and Exhibit – The interaction of community members and parents, as well as the impression they receive during their visit to the school, is important. Most of the visitors will not have the opportunity to tour throughout all areas of the school, and certainly will not have the opportunity to observe the activities and products of student academic work. The ability for key public areas of the building to exhibit this work, not just statically but also dynamically, is a key component in allowing visitors to experience the learning which is going on throughout the building, without the need to tour deep into the academic zones, which is obviously not practical. The building should place "Education and Student Activity on display for all to absorb". This instills student pride through the exhibit of their work; and can easily be done by providing opportunities for fixed exhibits, video display, or any other practical and functional means. This kind of exhibit opportunity should not be limited to just the displays at entry points accessible to visitors, but should also be inherent within the academic zones, allowing students to present and exhibit their project work to other students.

It is also important that entry areas exhibit the history and flavor of the Town and school department, through the presentation of artifacts, information, and exhibits.

Beyond STEAM – There has been much talk about STEAM and the need to integrate Science, Technology, Engineering, Arts, and Math within the Academic Environment. The modern 21st Century middle school or high school environment goes beyond this, with the goal of integrating these key subjects into real-world business and scientific applications in an effort to help students understand the importance of these topics individually, but to also understand the way they support each other.

Business Community Connections – One of the key components of all successful

comprehensive high schools is their ability to integrate the individual programs with their associated professional business applications in the community. Convenient access to the specialized teams by business and scientific leaders within the community is key to this important collaboration.

Media Distribution and Retrieval – The library media center should be a media distribution and retrieval resource which students can utilize throughout the school environment. The functions of the library media center should not be limited to a single location within the building, as students are retrieving data resources constantly, and limiting this retrieval to a single location within the building is no longer efficient. Research can occur in many places throughout the building, and distributing library resources to locations which encourage in lieu of prohibiting use will make for a more dynamic environment. Media broadcasting, video editing, and video productions are all academic endeavors which may possibly have a link to the media center, but their carefully placement in order to allow them close integration with other disciplines should also be explored.

Educational technology should be integrated seamlessly throughout the educational environment. Campus-wide wireless access is key to creating a flexible environment where students can complete assignments without the confines or boundaries of fixed computer labs. Labs which are dedicated to specific tasks (like video production or video editing, for example) may be required, but this kind of restrictive specific-use space should be created only after thoughtful justification and consideration of a more flexible "create, research, and explore" environment that provides opportunity for data based activities to be completed in any classroom, or in any part of the building.

Socialization and Learning – Social skills and the need to communicate outside of the project/ instructional environment is a key element in promoting positive student development. Students must have the opportunity to socialize with their peers without being confined to the traditional restrictions of a "Cafeteria" where students are herded into a space and directed to function in a stereotypical way. Schools where social dining is distributed throughout the school environment with less restrictions and/or boundaries have proven to promote significantly more student collaboration while simultaneously reducing discipline problems. The student dining area can also play a significant role in parent and community interaction with the school, by providing flexible space which supports presentations, programs, and events. It can serve as one of the primary social hubs of not only the school, but also the entire Abington community.

The School as a Business Incubator – There are many important elements in creating a successful school environment where project-based activity is visually and physically integrated into the core of the school while simultaneously opening themselves to community involvement. It requires re-thinking the "Core" or "Commons" of the school, the definition of "Entry", and all of the necessary aspects of security. The school must operate very much like a business incubator, promoting the necessary collaboration while simultaneously creating the necessary boundaries for staff, administrators, parents, and students.

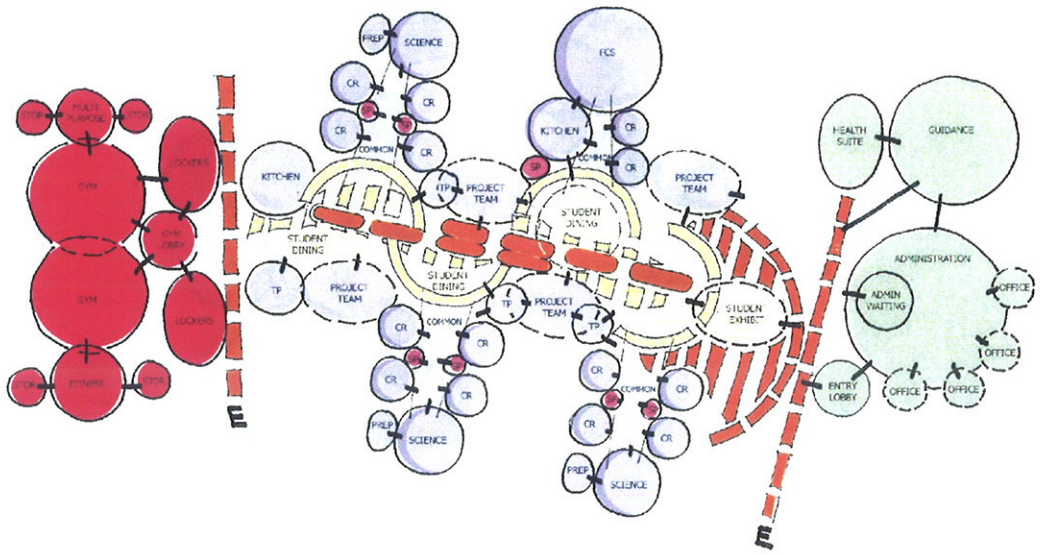
Indoor/Outdoor Connections – The connection of indoor and outdoor spaces is important to creating a vibrant and energized educational environment. Students can become more engaged in utilizing outdoor space if an effort is made to insure the appropriate visual and physical connection. Outdoor space can go beyond recreational playfield use and can provide project space, social space, classrooms, study areas, and other support areas for the educational environment. It has a natural integration to many sciences, and should not be ignored as part of a 21st Century educational environment.

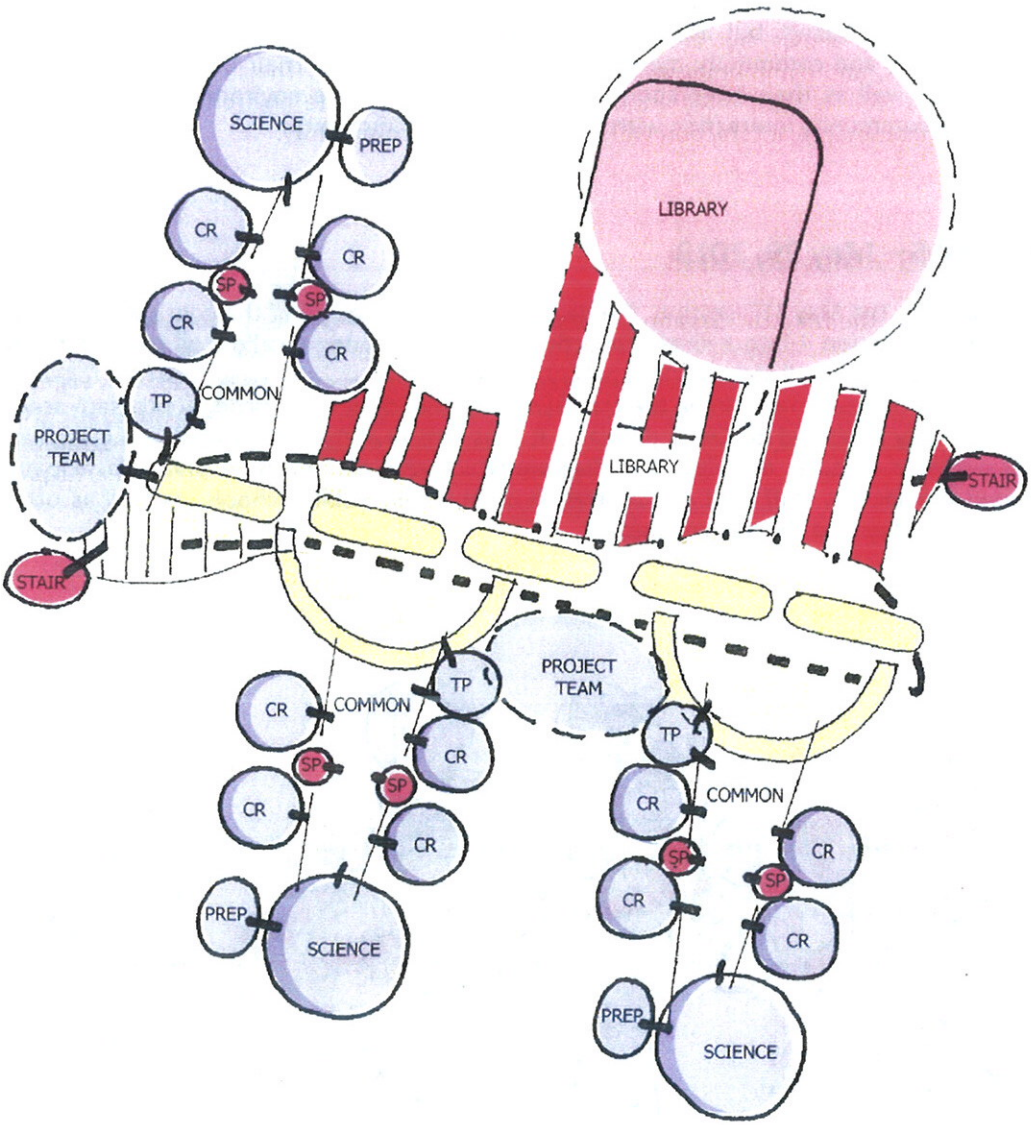
Learning Beyond the School Day - As students become involved in more activities, the time they spend on the academic campus expands. These activities include music, performance, athletics, research, science, academics, and more. Many students study after school as they await upcoming practices, performance or activities which involve them or their friends. Providing appropriate spaces for such activities is a key component of the 21st Century academic environment.

Community Use - In small towns like Abington, the schools truly become the center of community use. Gymnasiums, performance theaters, lecture halls, media labs, etc. all become a highly utilized community and educational resource. These facilities are not "extras" to be added if funding allows, but are inherent resources that will serve the student, teachers, administrators, and community members for decades to come. Their careful planning and inclusion, as well as their integration into the community-wide environment, is critical to supporting community interaction with the educational community.

SESSION 5 – May 29, 2013

Subsequent to the May 16th session, the design team combined all of the concepts and ideas generated in session 4 into a single collective diagram intended to allow all participants to begin to consider how all of the various program components could work successfully together, while simultaneously maintaining the critical characteristics of the individual program areas. Although only intended to be a diagram, it was the first opportunity for programming participants to consider and discuss a diagram which resembled a floor plan. Participants included the faculty, staff, and administration of Abington Public Schools, as well as other interested parties and the design team.

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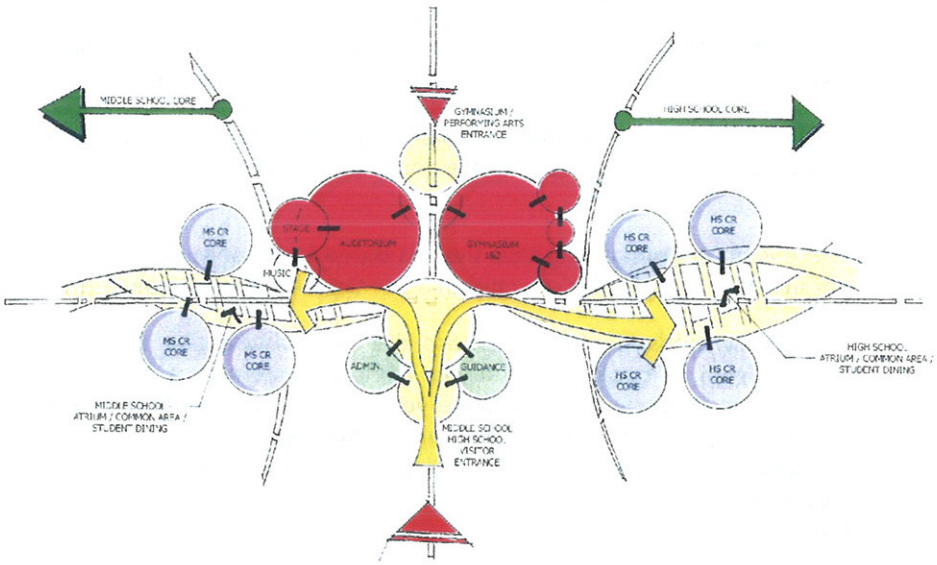
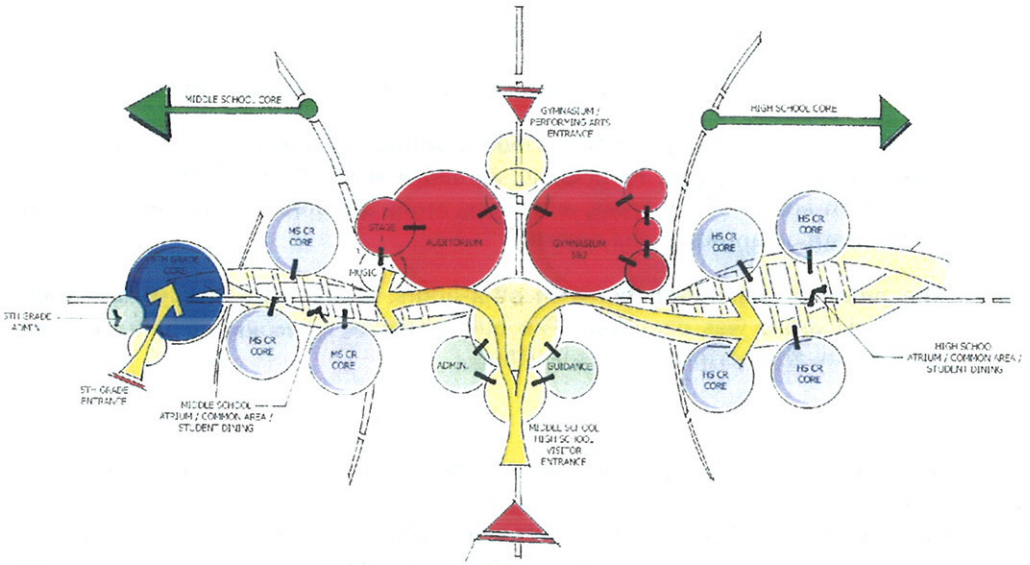
Some of the key concepts which evolved from the discussion are as follows:

- Both the middle school and the high school remain committed to breaking down the student populations into groups or teams of approximately 125 students.
- At the high school level, there remains a need to have close physical ties between science labs even if these labs are going to be distributed throughout the groups/ teams.
- There is an understanding that the out-dated traditional approach to departmental organization is no longer effective in a 21st Century learning environment.
- The library/media center is perhaps the most challenging space as technology is moving from a "book based" media retrieval system to a "data based" approach. There is no longer a need for large volumes of hardcopy books; however, the role of the library media center within the learning environment remains significant and prominent. There was much discussion about how the library/media center and its respective functions and spaces should be located and/or distributed throughout the building.
- The importance of student exhibit space throughout the educational environment was discussed at length.
- The importance of "Entry and Control" was discussed at length.
- Participants discussed the values of visual connections between multiple floor levels.
- The role of student dining and its distribution within a 21st Century learning environment was discussed at length. Participants agreed that some blending of student areas, circulation areas, exhibit areas, and dining areas could be highly effective under the appropriate organization and control.
- The need for separation between after-hours "public use" spaces and the core academic areas was discussed. The public spaces were identified to include the gymnasium and performing arts facilities.

The second part of session 5 was organized to facilitate a discussion about a co-located middle/high school, as this will likely be one of the specific options that would address many of Abington's current challenges. Participants were encouraged to provide input and critique on a diagram that outlined some of the functional challenges and opportunities which lie within a co-located school, combining the middle and high school populations.





After much discussion it was generally agreed that:

- Grades 5 through 12 could easily co-exist within an appropriately designed and separated facility. Combining these populations would provide many inherent educational benefits to all students. For example, 5th through 8th grade students could have access to enhanced amenities such as a performance auditorium, video production studio, and many more academic programs than they would have in a stand-alone middle school. Additionally, by adding the 5-8 population to a proposed facility, justification can be made for larger program areas such as auditorium, gymnasium, student dining, etc., that would otherwise be very limited in size due to the relatively small high school population.

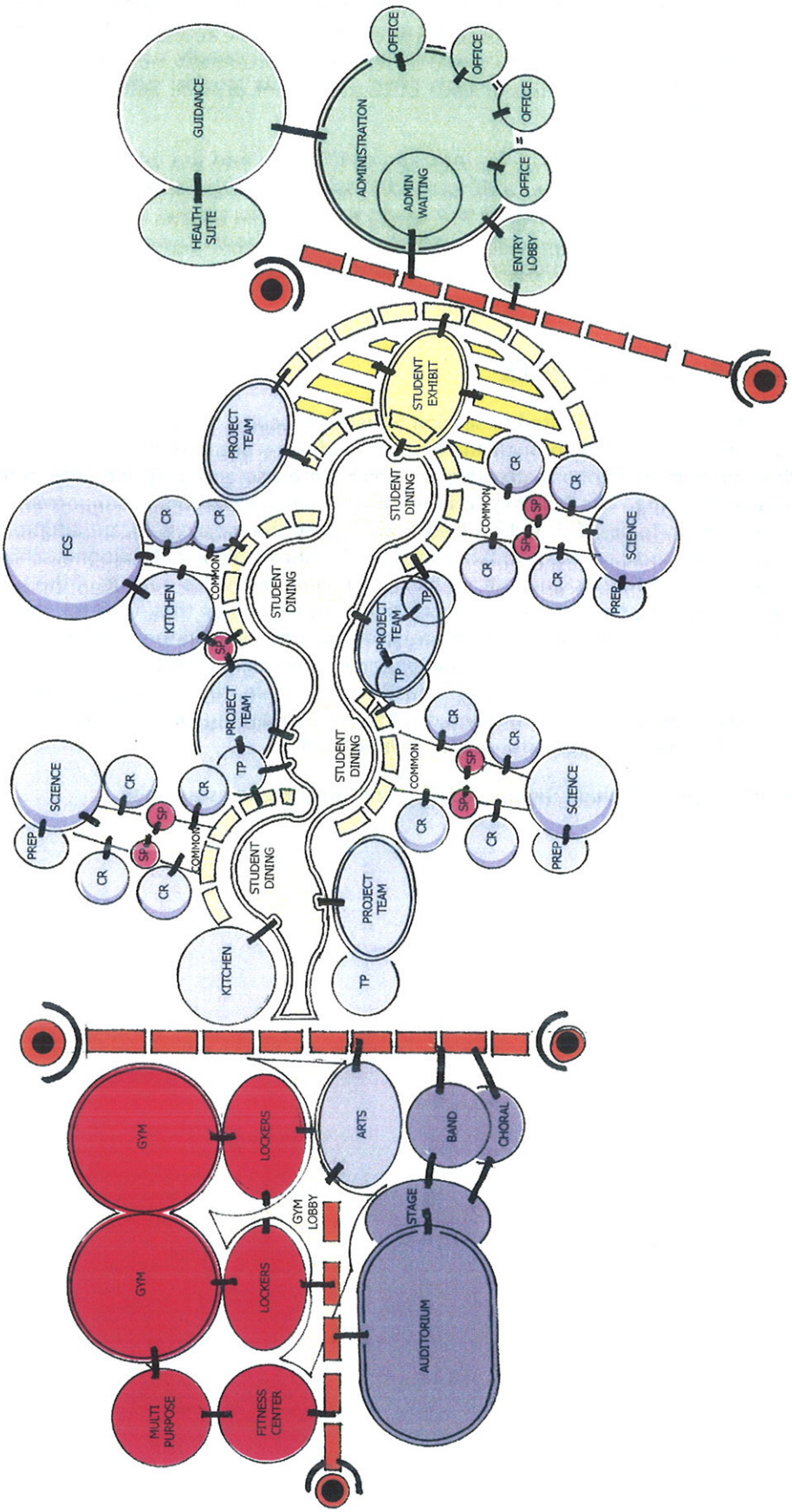
- Most participants felt that horizontal separation between the middle school and the high school would be required in order to achieve success. (Meaning the middle school and the high school would be separated horizontally, not vertically, as stacking the two schools on top of each other might not provide sufficient identities and separation)

- Participants agreed that the inclusion of 5th grade into the middle school would be beneficial and effective, with no need to specifically segregate the 5th grade form the 6-8 students. Combining all four grade levels would expand program opportunities for all, and would provide a sufficient middle school population for teaming and organizing in a true modern middle school environment.

SESSION 6 – June 13, 2013

The Bubble Diagrams presented in session 5 were revised to reflect some of the input and conversation that evolved through the session, and were prepared for presentation to the Building Committee. All those attending session 5 were also encouraged to attend session 6, with many attending. The Building Committee generally reiterated and supported the ideas, concepts, and strategies that had evolved to date, with the most significant addition being a discussion about the increased student use of the facilities outside of traditional school hours. Participants agreed that as students are involved in more activities outside of the school day, they are completing homework and socializing with friends as they wait for their specific activities or interest. For example, students currently congregate in the gym lobby completing homework as they wait for their scheduled practices to begin or they wait for other friends to complete their scheduled activities. The creation of safe, secure, and thoughtful indoor/ outdoor spaces which support this kind of 21st Century learning, performing, practicing, and socialization is vital to a successful school environment.

The following pages include the revised diagrams presented in session 6: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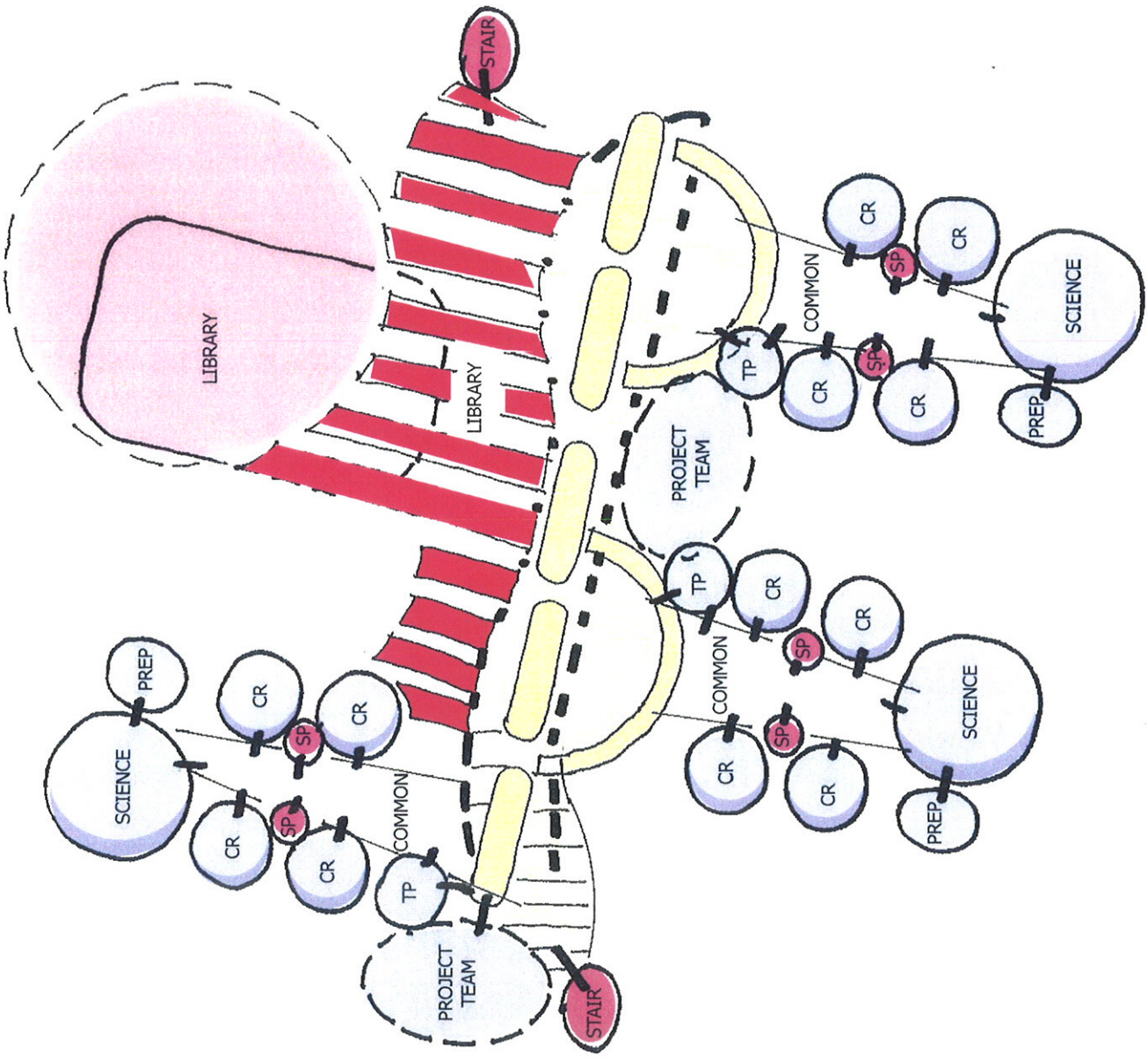
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1	Major Milestones Timeline
2	Facilities Evaluation
3	Site Evaluations Summary
4	Educational Visioning Summary Document
5	Educational Programming Document
6	Introduction Document
7	Space Summary Documents
8	Options Considered Document
9	Evaluation Matrix
10	Draft of Cost Analysis Options
11	Cost of New School vs. Renovation Document
12	Review of Major Milestones

abington public schools educational program

ABINGTON PUBLIC SCHOOLS

"The mission of the Abington Public Schools is to provide all students with relevant, challenging educational experiences to prepare them to be engaged, responsible citizens and members of the global community."

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MODULE 3: PRELIMINARY DESIGN PROGRAM

1.2 EDUCATION PROGRAM

1. OVERVIEW

Mission:

The mission of the Abington Public Schools is to provide all students with challenging educational experiences necessary to reach their full potential and become informed, responsible citizens. The mission is supported by several guiding principles that include: that all decisions are made in the best interests of students, that all students can be successful; the belief in fostering the physical, intellectual, social, emotional, and artistic development of students; ensuring a safe, supportive and equitable learning environment; the realization that successful experiences build self-confidence, perseverance, and self-esteem; and that reasonable rules of behavior are necessary to foster the development of self-discipline and personal responsibility. The guiding principles also include that education is a shared responsibility among home, school, and community; realizing the importance of a culture of shared decision making, collegiality, and civility; that professional development is essential for effective instruction and improved student performance; the need for a cyclical and focused process of curriculum review and update; and the use of technology to enhance teaching and learning.

Current and Proposed Education Program:

The current and proposed Educational Program for Abington's Schools has been summarized by the Educational Committee on the following pages. The current program reflects limitations imposed by existing school facilities that have traditionally served Abington's educational needs. The District looks forward to developing a physical setting that will support the proposed educational initiatives, simplifying education delivery, and making the program easier and more cost effective to administer and operate. The education program as further discussed below incorporates the most current District goals, Strategic Plan, and School Improvement Plans.

2. GRADE AND SCHOOL CONFIGURATION

Current:

The Abington Public Schools is a Pre-Kindergarten to Grade 12 district with an approximate enrollment of 2,100 students. The District includes three (3) elementary schools, one (1) middle school, and one (1) high school as follows:

- Center School serving Pre-Kindergarten and Kindergarten with offerings for Kindergarten that include three (3) sections of full-day tuition and four (4) sections of half-day.
    - Pre-Kindergarten: 57 students
    - Kindergarten: 133 student
- Beaver Brook Elementary School serving Grades 1-4 with enrollment of 685 students.
- Woodsdale School serving Grades 5-6 with enrollment of 313 students.

ABINGTON PUBLIC SCHOOLS
FROLIO MIDDLE SCHOOL PROJECT

- Frolio Middle School serving Grades 7-8 with enrollment of 344 students.
- Abington High School serving Grades 9-12 with enrollment of 498 students.

The current school assignment and grade configuration are based largely on the District's efforts to consolidate operations and to work within the restrictions imposed by the physical layout and limited size of educational facilities throughout the Town space that is currently available. The existing buildings and the resulting grade level configurations do not conform to the desired configurations, but instead represent the best possible response under the given conditions. This response does not necessarily provide the best educational program. For example, having only 344 students (Grades 7 and 8) in a middle school environment greatly limits the number of program offerings and requires that staff shared by other grade levels be constantly traveling back-and-forth between schools. Eliminating this obstacle would result in greater efficiencies and more educational opportunities for students, allowing staff to remain in a single building and spend more time collaborating with students and fellow teachers. Additionally the current available buildings do not include suitable space or configurations to support teacher collaboration, flexible student groupings, presentation space, small group instruction, testing, tutoring, or project-based learning environments that can easily integrate into the regular classroom activities. The Frolio Middle School also presents a building that was constructed in 1937, a time when traffic, vehicle access, parking, universal accessibility, school meal programs, and modern teaching principles were never considered during its development. Although the school is eighty (80) years old and has since received limited improvements, the school is in good condition; however, classrooms are grossly undersized and room layouts and adjacencies are not conducive to 21st Century educational strategies. Facilities, infrastructure and systems, services, and access do not fit the needs of modern educational practices and are now well beyond their intended life expectancy

Proposed:

Options considered to improve facilities and program services, and to promote operational efficiencies, include facilities to support 665 students in Grades 5-8, 495 students in Grades 6-8, 945 students in Grades 6-12, and 1,105 students in Grades 5-12. These configurations would allow the grades to be clustered and allow staff, now separated in multiple buildings and spending time traveling between buildings, to work in vertical teams giving them more time to spend on teacher collaboration and student instruction, helping to improve student achievement. .Core student support services, such as language, reading/math skills, therapy, psychological and nursing, would also work more efficiently within a single school structure, maintaining a consistency of staff and support between the various grade levels.

The Abington Building Committee is also investigating the possibility of including the Pre-K Program at Abington High School to provide not only an "experiential learning space" for Pre-K students, but also a vocational component for Abington High School students. High school students would not have to travel outside of the facility in order to participate in these programs, and the number of students who could participate in this highly enrolled program would no longer be limited. Additionally, the options under consideration would improve student transitions, increase parental investment, enhance collegiality, and improve communication/collaboration between staff and families.

3. CLASS SIZE

The Abington Public Schools recognize that class size is an important factor in quality education, and the District does, subject to space availability, staff support, and all other educational considerations, strive to maintain class size conducive to an effective learning atmosphere. The Abington Public Schools have no written class size policy, however it has been a long standing philosophy to prioritize the lowest class sizes at the lowest grades. Class sizes of special education students are compliant with DESE guidelines.

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FROLIO MIDDLE SCHOOL PROJECT

4. SCHOOL SCHEDULING

Current:

The school schedule is established annually by considering lunch and recess needs, specialists availability for physical education/wellness, music, art, and library/media time, uninterrupted blocks of classroom time for literacy, mathematics, professional development of staff, and union-defined preparation and meeting blocks.

The current school scheduling method includes considerations for:

HIGH SCHOOL:

The student school day is from 7:25 a.m. to 1:57 p.m. and consists of seven (7) forty-nine (49) minute periods. Students are offered a total of forty-three (43) one (1)-year long courses and thirty (30) semester courses. Included within the infrastructure are a dedicated business lab, digital art lab, electronic music lab, band and chorus space, and five (5) basic science labs.

The school schedule is programmed through a process of on-line course assignments with teacher recommendations and supplemental student selections completed with guidance counselors. Priority status for class selection is given to seniors, juniors, sophomore and lastly freshmen. Faculty course and class assignments are accomplished with priority given to the scheduling of shared staff and AP classes. Twenty (20) singleton and/or AP classes drive the schedule often squeezing students out of conflicting singletons running at the same time.

MIDDLE SCHOOL:

The student school day is from 7:10 a.m. to 1:44 p.m. and consists of seven (7) forty-nine (49) minute periods. Course and class assignments are accomplished with priority given to schedules of shared and part-time staff. The Follett Aspen Student Information System (Aspen X2) is used to schedule students at grade level based on recommended courses. Placement tests/Grades/Effort/MCAS are used as criteria for placement of students into leveled courses in Grade 8. Grade 7 courses are heterogeneous except for Grade 7 math, which is leveled into Grade 7 accelerated math and Grade 7 math.

Proposed:

The proposed school scheduling method includes considerations for:

HIGH SCHOOL:

Abington High School will continue on-line course recommendations and selections. In addition to the regular school day, we would include an after-school program for both credit recovery and enrichment. The scheduling model should create an alternative day schedule for non-traditional students to begin and end later in the day and a flexible scheduling and hybrid model classes that incorporate on-line learning. The schedule should provide common planning time in the school day for teachers and include advisory time on a regular basis within the school day that would incorporate civic and community service responsibilities and expectations that work toward and conclude with a capstone senior project. A late bus provided for students involved in activities/athletics and alternative days or supports would enhance the program.

MIDDLE SCHOOL:

ABINGTON PUBLIC SCHOOLS
FROLIO MIDDLE SCHOOL PROJECT

Aspen X2 is used to schedule students based on an interdisciplinary teaming model. Placement tests/Grades/Effort/MCAS are used as criteria for placement of students into courses. Continue on-line course recommendations and selections. Continue to build common planning time into the school day. Include Advisory Program time on a regular basis within the school day that would incorporate an academic check-in, the character education program and community service projects. We will offer both required courses and electives. Include a late bus for students involved in after school activities and support programs, such as extra teacher help and homework club.

5. TEACHING METHODOLOGY AND STRUCTURE

Current:

Teachers at all of Abington's schools utilize district-approved and teacher-developed curriculum based on the Massachusetts State Curriculum Frameworks and the evolving Common Core Curriculum. Abington has been traditional in its educational values and its teaching methodologies. Recently the school community has engaged in professional development to begin to move to an educational delivery model that is more reflective of the philosophy of the Partnership for 21st Century Skills. The current teaching methodology system employed at the middle and high school levels, due largely because of the physical layout of the buildings, consists of isolated departments that limit the ability to deliver instruction in an interdisciplinary manner.

HIGH SCHOOL:

- Abington High School is a comprehensive high school with both leveled and unleveled courses in traditional disciplines (AP, Level 1, Level 2, Level 3 and unleveled).
- Students must successfully complete 110 credits including four (4) years of English Language Arts, four (4) years of Mathematics, three (3) years of History, three (3) years of Science, four (4) semesters of Physical Education, one (1) semester of Health, and one (1) semester of Critical Thinking and Design.
- Advanced Placement classes in Art, Mathematics, English Language Arts and History
- Dual Enrollment with Bridgewater State University and Massasoit Community College
- Virtual High School on-line learning
- Discipline specific department heads/directors share responsibility with building administrator for the development, review, and implementation of curriculum.
- Committed to Massachusetts Curriculum Frameworks and The Common Core State Standards
- Teachers are assigned five (5) instructional periods, one (1) duty period, and one (1) prep period.

MIDDLE SCHOOL:

Teachers are currently in grade level teams. They will transition to three (3) integrated teams of teachers (effective August 2013) consisting of English, Math, Science, Social Studies, and Special Education: Grade 7, Grades 7/8, and Grade 8. Teachers are assigned five (5) instructional periods, one (1) duty period, and one (1) prep period. The year is divided into trimesters. Shared and part-time grade level teaching staff (Music, Health and Spanish) makes a rotating schedule very challenging and restricts the scheduling process. Discipline specific department heads/directors share responsibility with building administrator for the development, review, and implementation of curriculum.

Proposed:

The options under consideration for the proposed project are all targeted at providing a physical environment which would fully support and maintain the traditional grade, departmental, and team

ABINGTON PUBLIC SCHOOLS
FROLIO MIDDLE SCHOOL PROJECT

teaching structure, while affording more opportunities for students and staff to work in a horizontal and vertical interdisciplinary way that fully integrates special needs programming. The vision for teaching and learning utilizes a systemic and diverse repertoire of instructional practices in all classrooms that are research-based, collaborative, and evidence-based (focused on and informed by student learning), that respond to students when they do not learn, by acknowledging a shared responsibility for underperformance, collaboratively diagnosing underlying issues, and prescribing and experimenting with appropriate intervention strategies as a core component of the regular education program, develops and nurtures a culture that, for all members of the community (students and professionals), and promotes and expects continuous learning, embraces respectful discourse as a pathway to growth, and believes that learners of all ages can continue to grow. In order to support and achieve these goals, the proposed school will develop a series of Small Learning Communities (SLCs) or Teams. Because the options available for consideration include multiple grade and enrollment considerations, the program as proposed is organized in a hybrid model that includes supports for a series of SLCs but also maintains opportunities for traditional departmental operations. Additionally, the proposed structure will continue to develop and align to 21st Century Skills.

HIGH SCHOOL:

The current and proposed initiatives include:

In a new or renovated high school, a STEAM organization within the academic environment would be optimal. The integration of the most up-to-date technology should be seamless throughout the facility. Each department or cluster of classrooms should have a common planning/prep/conference space and appropriate office space. Presentation/display spaces should be plentiful throughout the school. Team rooms and project-based learning labs should be incorporated into each cluster or SLC. These spaces should be integrated with the team, but may also serve a dual purpose as specialized vocational instruction spaces.

Each student will be required to fulfill the MassCore minimum graduation requirements. For "struggling students," intervention supports will be available before and after school. The teacher and student day should be flexible enough to support individual programming.

MIDDLE SCHOOL:

The proposed program would include six (6) integrated teams – Grade 5, Grades 5/6, Grade 6, Grade 7, Grades 7/8, Grade 8 – while affording more opportunities for students and staff to work in a horizontal and vertical interdisciplinary way that fully integrates special needs programming. The vision for teaching and learning utilizes a systemic and diverse repertoire of instructional practices in all classrooms that are research-based, collaborative, and evidence-based (focused on and informed by student learning), that responds to students when they do not learn by acknowledging a shared responsibility for underperformance, collaboratively diagnosing underlying issues, and prescribing and experimenting with appropriate intervention strategies as a core component of the regular education program. This structure develops and nurtures a culture where, for all members of the community (students and professionals), continuous learning is promoted and expected. Our structure embraces respectful discourse as a pathway to growth, and believes that learners of all ages can grow. In order to support achievement of these goals, the proposed school will develop a series of Small Learning Communities (SLCs), including such teams as the Special Education Team. We will have a five (5) days per week schedule, with the year based on quarters, and a schedule that permits both the Advisory Program and the Extension (Intervention) Program for all students. There will be an increased use of project-based learning and differentiated

instruction as a result of building structure and available resources. 21st Century Skills will be embedded into the curriculum and will include such skills as (1) analytical, creative thinking and problem-solving; (2) integrity and ethical decision-making; (3) effective multi-modal communication; (4) collaboration, leadership, teamwork and innovation; and (5) student as producer (i.e., initiative, risk-taking).

6. TEACHER PLANNING AND ROOM ASSIGNMENTS

Current:

Teacher planning and room assignments are made in compliance with the Abington Education Association collective bargaining agreement as follows: Space in each classroom for safe storage of personal belongings, instructional materials and supplies, heated employee workrooms containing adequate equipment and supplies to aid in the preparation of instructional materials. Our collective bargaining agreement mandates an appropriately furnished room reserved for the exclusive use of the school staff for faculty dining. Currently, a small teacher dining room is located at the Frolio School and at the High School. The Frolio dining room is undersized to faculty size and must also serve as a teacher work/planning room due to the limited space and facilities within the building. There is no space available for effective teacher collaboration and no space available within the team areas for teacher work or planning. The remote location of the small teacher work area is inefficient and does not promote collaboration among team teachers.

HIGH SCHOOL:

Currently at the High School, the Faculty Lunch Room doubles as planning space with two (2) round tables, two (2) desktop computers, a printer, a telephone, and multiple copy/riso machines. There are five (5) shared departmental office/work spaces with a telephone, computer, and either small table or teacher's desk. Business, Health/PE/Wellness and Guidance do not have any dedicated planning/work space. Classes and teachers are assigned based on available rooms.

Classrooms are not necessarily discipline specific or teacher dedicated. For example, a Health class may be in a math classroom on the third floor, Period One, Semester One and may in addition be in an English classroom, Period Four, Semester Two. Part-time staff and shared staff do not have dedicated classrooms. Numerous courses are scheduled based on specific room availability that limits student opportunities. For example, 21st Century Media and State of the Union cannot run simultaneously because they share the mobile IPAD lab. Electronic Music and Digital Art share a multi-purpose lab with keyboards being stored in a portable metal cabinet. Band and Chorus share the only space that could accommodate more than thirty (30) students and therefore may not run simultaneously. Classroom constraints severely limit the ability of students to opt into these courses.

Academic disciplines are not necessarily in adjacent spaces except for science.

MIDDLE SCHOOL:

Current:

Core subject teachers would ideally be on the same floor, but this is not always possible due to the building's small size and restrictive configuration. Seventh grade teacher classrooms are on the second floor, eighth grade teachers are on the third floor. Specialist teachers are spread throughout building. Both eighth grade Spanish teachers are located on the first floor. Classrooms are not necessarily subject-specific. For example, a math applications teacher uses an English teacher's classroom. Not all faculty members have dedicated space. For example, **the** .5 Special Education Teacher uses other teacher's rooms for her Academic Support classes. Disciplines are not adjacent to one another. Core grade level teachers have common planning time on a 3x/6 day cycle. Each teacher has one (1) prep period per day.

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The Frolio dining room is undersized to faculty size and must also serve as a teacher work/planning room as well as a small group teacher/student room due to the limited space and facilities within the building. There are five (5) (Total) office spaces within the building: one (1) on the second floor for the Principal/Office Secretary, one (1) on the second floor for the Assistant Principal, one (1) on the basement floor for the School Psychologist which is shared with the Speech and Language Pathologist, one (1) on the basement floor next to the kitchen for the Behaviorist, and one (1) on the second floor for the Guidance Counselor.

Proposed:

To further support teacher educational preparations, promote educational collaboration and integration of student services, and strengthen professional development, the new building should provide "flex" spaces in each grade level cluster for teachers to meet in Professional Learning Communities before and after school. These spaces could be used for flexible grouping of students during the work day or teacher leader meetings throughout the year. These spaces should be conducive to collaboration. A teacher dining room shall provide space for employees to have lunch, and further encourage communication and collaboration. Building design shall enable grades to be clustered.

HIGH SCHOOL:

Proposed for Abington High School:

- Dedicated instructional spaces for Band, Chorus, Electronic Music, Media Production, Digital Art
- A modern media center for data retrieval, research, and student support
- A language lab
- Work collaboration and planning space equipped with computers, telephones, scanners, copy machines, printers
- Culinary Arts space/facilities
- Centralized support services suite
- Special Education service provider space to include a reading lab and testing space
- Modern science labs
- Practice and storage rooms for music
- A fitness room, indoor walking track, health classrooms and gym configured into a wellness wing
- Every classroom lab/internet ready
- Appropriate AP testing space
- Department offices that include storage and conference areas
- A performance auditorium to support much needed presentation, instructional, performance, and community activities
- Small Learning Communities (SLCs) which support academic teams
- Open circulation and lobby areas which support exhibits of student work

MIDDLE SCHOOL:

Core subject teachers, including foreign language teachers and special education teachers, are located by teams in neighborhoods or pods around a project room, planning room, and teacher offices. The neighborhood will provide a visible and flexible learning environment for each team, as well as provide a space for building greater community and engaging in ongoing collaborative projects. There will be an

open space in the middle which will provide for enough space to hold whole team meetings, or to meet in smaller groups. This space will also provide for the display of student work. These rooms provide window viewing which allows for student use of space without jeopardizing supervision of students. Classrooms will be equipped with adequate storage space and a minimum of at least one (1) interactive whiteboard. Project room will be equipped with movable furniture and some movable walls for team teaching and flexible grouping. All classrooms, project rooms, and planning rooms will have large whiteboard space. All teams, including related arts and science, will have common planning time at least once every other day. All rooms will be equipped with an adequate number of outlets. Each neighborhood includes a public presentation space. Ideally, each neighborhood would have easy access to the outdoors. The Grades 5 and 6 neighborhoods will be located in the same wing with the science classrooms adjoining in order to share materials. The Grades 7 and 8 neighborhoods will be located in the same wing with the science classrooms adjoining as well. The Grades 5/6 neighborhoods and the Grades 7/8 neighborhoods will be in the same building so that teachers, specialist, staff, and instructional space can be shared. Math classes will be next to the science classrooms within each neighborhood. The English and Social Studies classrooms will be adjoining as well. To further support teacher educational preparations, parent-teacher conferencing, promote educational collaboration and integration of student services, and strengthen professional development, the new building will provide "flex" spaces in each classroom neighborhood for teachers to meet in Professional Learning Communities, which will be equipped with computers, telephones, scanners, copy machines, and printers. These spaces could also be used for flexible grouping of students during the work day or teacher leader meetings throughout the year. The neighborhood will also include a reading lab and testing space for special education service providers. A teacher dining room within each pod shall provide space for staff to have lunch, and further encourage communication and collaboration.

Modern Science Labs (one [1] per team) will be located in each classroom neighborhood. The science labs will be equipped with appropriate furniture (demonstration table, workstations, ability to have students work both independently and in cooperative groups) and equipment, including an eye wash center and other safety compliance components.

A Support Staff Suite of offices will include space for the School Psychologist, Special Education Team Chairperson, Behaviorist, and Guidance Counselor, and a dedicated conference room and a dedicated room with built-in file cabinets for student records.

The Support Staff Suite will include a work station with two (2) computers for students to work on school work and vocational research. Space will be available for bookshelves, materials cabinets, and parent resources.

The Administration suite will be located at the building entrance and will include offices for the Principal, Assistant Principal and Office Secretary, teacher mailbox room with copier, scanner and printer, and a kitchenette.

The School Nurse will also be located near the main entrance for easy access for parents and medical personnel/vehicles.

6. PRE-KINDERGARTEN AND SPECIAL EDUCATION

Current:

The Abington Public School Department's Preschool Program is an integrated, language based model, where children with special needs are included in a classroom community with their peers. The

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Massachusetts Curriculum Frameworks and Common Core Standards are utilized to provide academic experiences as well as ongoing interactions with adults and other children, allowing for the development of important social, language, and thinking skills. Curriculum areas that are specifically addressed include:

- Social and emotional development
- Cognitive development
- Language development
- Fine and gross motor development

Children attending the Integrated Preschool with Individual Education Program plans meet specific goals through program participation, behavioral support services based on the principles of applied behavioral analysis, speech and language therapy, occupational therapy and physical therapy as determined by the child's special educational Team.

The Integrated Preschool Program follows the Department of Early Education and Care's approved model of eight (8) regular education students to seven (7) students with special educational needs in each classroom session. Sessions are generally a half-day in duration, however, some students may be determined to require a full day program due to special education needs.

Integrated preschool classrooms are currently located at the Center Elementary School. Specialized services for children identified with Autism Spectrum Disorder (ASD) are offered within the district at specific schools. These programs range from full inclusion to substantially separate programs depending on the need.

Interventions in classrooms are provided by special needs teachers, speech/language pathologists, reading teachers, occupational and physical therapists, behavior specialists, school psychologists, English Language Learning teachers, and paraprofessionals.

Proposed:

It is proposed that consideration be given to moving the Pre-Kindergarten Program to Abington High School. This could provide an early childhood vocational experience for Abington High School students. Additionally, consideration would be made to move the Pre-Kindergarten Program to Beaver Brook Elementary School. Regardless of the location, either would allow for growth in the program. This would both increase and improve the physical space of the program. It would allow for the better integration of technology into the daily practices and routines of the teachers and students. State of the art technology tools for teaching and learning, connectivity and the required electrical service capacities are more available at the Beaver Brook Elementary School. Greatly improved indoor and outdoor physical activity and play spaces are also available at the Beaver Brook Elementary School for the children.

7. KINDERGARTEN

Current:

Three (3) Full day programs with tuition of $3,050 per student
Two (2) Half-day programs

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Proposed:

The Abington Public Schools plan to offer universal, full day kindergarten to families and has not done so in the past due to space constraints. The proposed change would move the current kindergarten from the Center School to the Beaver Brook Elementary School where program expansion would be available. Research confirms that a full day kindergarten program provides increased opportunities for learning in a variety of contexts that include independent, small group, and teacher directed activities. Full day kindergarten provides children more time to explore topics in depth and provides for greater continuity of day-to-day activities. Full day reduces transition times and provides more time to closely monitor individual progress and provide the necessary interventions at an earlier age. Children also experience more opportunities to enhance their social learning skills in a nurturing environment.

8. LUNCH PROGRAM

Current:

Abington High School currently houses the Central Kitchen for the district. All preparation and cooking of food product occurs in the Central Kitchen and is then transported to the various schools; however, each school does have adequate facilities to heat, reheat, and serve lunch products. (Each school has, at a minimum heating ovens, stove tops, and refrigeration/freezers.)

Abington High School currently has three (3) lunches, each approximately twenty-five (25) minutes in duration. Students may choose from the hot lunch selection, pizza, salads or a made-to-order wrap/sub sandwich. A-la-carte items are also available in the form of bagels, hot pretzels, ice cream, and various beverages.

Frolio Middle School currently has three (3) lunches, each approximately twenty-two (22) minutes in duration. Students may choose from the hot lunch selection or an alternative selection.

On early release days, brunch is served at the elementary and middle schools, but not at the high school. Each month the menu is developed by the Food Service Director and prepared with an "in-house" staff.

Student participation has seen a 5% to 7% decrease over the last few years which is consistent with the operation of food service programs across the region.

A breakfast program was attempted this year at the Frolio Middle School and Beaver Brook Elementary School. Both schools experienced very minimal participation (less than ten [10] students per day) and the program has therefore been canceled.

Proposed:

The District would continue the operation of a Central Kitchen for the District which will require accommodations for heat, reheat, refrigeration, service and cleaning facilities for remote school facilities. Improvements to the High School kitchen would be of considerable interest so that the program may be extended to provide greater selection and options for healthy choices by students. The cafeteria would have a secure and separate entrance for community use. The ability to secure this space for night and community use is very important to the members of the committee. Program design should ensure that two (2) grade levels would be able to be served concurrently. Design and layout shall foster communications between students by ensuring the space design supports furnishings which enable the students to communicate in small groups. Service lines should be designed to not bottleneck students, and ensure they are able to enter the cafeteria, select and purchase their meal, and be seated within a four

(4) to five (5) minute timeframe. This would allow at least a fifteen (15) minute eating period. Design should ensure students with food allergies can be seated, if needed, in a separate defined seating section.

8. TECHNOLOGY

Current:

Abington Public Schools have long committed resources to providing students with a supportive technology program to enhance student learning. Our current lab configuration is often fully utilized on most days, not allowing all students to have equal access to computer resources. Additionally, both the High School, and to a much greater extent the Frolio School, are limited in the inclusion of technology by the dated infrastructure at each building.

HIGH SCHOOL:

Abington High school currently has two (2) multiple purpose computer labs available to any class during the school day; except when Digital Art or Electronic Music are scheduled in those rooms. One (1) dedicated Business lab (thirty [30] seats) was installed two (2) years ago. The Library/Media Center has a thirty (30)-station computer lab. Two (2) mobile labs are used regularly, one (1) mobile I-Pad lab (25), and one (1) mobile Netbook lab (25).

The wireless infrastructure within Abington High School, while improving, is very limited.

MIDDLE SCHOOL

All seventh/eighth grade students receive direct technology instruction in the main computer lab. There is a second lab in media center, which is signed out and used by individual teachers. There is an iPad cart currently equipped with fourteen (14) iPads, signed out by teachers and used in classrooms. There is one (1) set of ActiVotes, a student response system, signed out by teachers and used in classrooms. Almost all classrooms have interactive whiteboards/projectors. There are two (2) computer labs: one (1) primary computer lab used all day for computer classes, and a second lab in the library media center. There are often two (2) classes in the library media center simultaneously, which creates a loud, distracting learning environment.

The wireless infrastructure with Frolio Middle School, while improving, is very limited.

Proposed:

HIGH SCHOOL:

The current and proposed initiatives include:

Abington High School should have state-of-art technology, including a robust wireless infrastructure to support one-to-one computing. Several multipurpose labs with different technology (for example, an Ipad lab, a Microsoft lab, a media production lab) will be designed and built. Specialty lab spaces, such as a Business lab, a Library/Media Center, and a foreign language lab will be available. We would also propose a state of the art performing arts space that would serve as an instructional facility for production.

MIDDLE SCHOOL:

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All seventh/eighth grade students will convert to 1:1 computing with a personal device. All classrooms will be equipped with at least one (1) interactive whiteboard, projector, audio amplification system, and student response system. Online curriculum/software will be embedded into the curriculum and will enable students to work at their own pace, allowing for greater differentiation of instruction. Pods of technology will be available in each team neighborhood (planning room and each individual classroom), the library media center, and in common areas throughout the building. Each adult in the building will have a dedicated device in classroom/assigned workspace. Teacher offices will be equipped with phones, fax machine, scanner, and printer. There will be wireless in every class. Ample electrical outlets will be provided where devices may be charged. Science classrooms will be equipped as science labs. There will be a robotics lab. There will be natural lighting throughout building.

8. ART

Current:

HIGH SCHOOL:

Currently, Abington High School has a very robust art program which includes three (3) art rooms, a small art office, and an outside storage trailer. The rooms are in two (2) different areas of the school building. The Drawing and Painting Room (104E), formerly a wood shop, is 1,827 square feet and is used primarily for 2-d art forms. This room also has a four (4)-station computer lab and black and white printer. A very small art office is accessible from this room. The Sculpture Room (103) is 1,080 square feet and is used for 3-d art forms. This room includes an electronic kiln and vent system. The Multimedia Computer lab (101) is 1,080 square feet and is used by art and music departments for instruction in Digital Art and Music. This room includes twenty (20) work stations, three (3) scanners, two (2) laser printers, and one (1) inkjet printer.

All the art rooms have an assortment of utility cabinets, flat files, racks, and lockers for the storage of art supplies, instructional references, and student work. Student work is exhibited in a case in the café lobby and also on an electronic display. Funding limitations have recently impacted the art program. We currently offer the equivalent of eight (8) courses, down from fourteen (14) courses.

MIDDLE SCHOOL:

The Art and Critical Thinking and Design (CTD) programs currently share Room 104 at Frolio Middle School. This room is grossly inadequate, with approximately 850 square feet, basement-style half windows, and a dropped ceiling. Students sit at one (1) of eight (8) tables which can accommodate up to four (4) students: three (3) students are preferable. An L- shaped desk with a teacher computer is located against a wall, and a long counter which contains four (4) student computers/printer is located on the opposite wall. The room has one (1) small sink located in a corner, six (6) built-in cabinets with shelves for CTD projects, and two (2) units of shelves for student art projects. Additionally, there is a closet located in room which is used to store art materials and an assortment of file cabinets and metal flat files used for resource materials. Since the room is used to run two (2) programs, every student who attends Frolio uses the room several times during their two (2) years at the school. With proper planning, the room has been adequate for its intended purpose. However, due to lack of space, adequate storage is always an issue. Three-dimensional projects can only be assigned if they are kept small and the number of students in the class does not exceed twenty-four (24). Still life arrangements cannot be permanently set up in the room because of lack of space. Students in art classes cannot use stand up easels nor do they have the freedom to move around the room without creating a chaotic situation. CTD class lacks a separate area for testing projects and furniture must be rearranged during test days. Projects completed during a trimester or school year is determined by class size. Classes with more than twenty-four (24)

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students require using smaller paper since eight (8) tables can only comfortably sit three (3) students. With four (4) students at a table, elbows bump and papers overlap.

Proposed:

HIGH SCHOOL:

In keeping with the suggested graduation requirement of MassCore, Abington High School would likely have a graduation requirement in the arts, necessitating a facility that would include increased student enrollment and course demand.

The new National Core Arts Standards (http://nccas.wikispaces.com) will include Visual Arts, Music, Dance, Theater, and Media Arts. Media Arts is an important new art form category in this framework. The proposed art program could include new cross-disciplinary courses in STEAM (Science, Technology, Engineering, Art, and Math) that target project-based instruction in creative product design, devices, architecture and inventions.

- Cluster the art classes in one (1) area of the building, on the ground floor with outside accessibility. Course content boundaries are blurring and workflows in the arts are changing. Students need to have access to different facilities, and also have strong adjacencies with other specialized instructional program areas.
- All art rooms equipped with the state-of-the-art technology infrastructure and instructional tools. Rooms need to have secure storage for electronic equipment and general supplies.
- All art rooms equipped with high ceilings, good natural and artificial lighting, cleanable surfaces, increased storage for student work and supplies, display boards, multiple large stainless sinks, and flexible equipment and furniture configuration.
- The Multimedia Computer lab (101) is 1,080 square feet and is used by art and music departments for instruction in Digital Art and Music. This room includes twenty (20) work stations, three (3) scanners, two (2) laser printers, and (1) one inkjet printer.
- All the art rooms have an assortment of utility cabinets, flat files, racks, and lockers for the storage of art supplies, instructional references, and student work.
- Student work is exhibited in a case in the café lobby as well as on an electronic display.
- Custom storage for student's works in progress, portfolios, active supplies, reserve supplies, tools and equipment
- School exhibition spaces and lighting for 2-d, 3-d, and digital art work
- A flexible, combination multimedia performance/presentation area
- Video conferencing for communication and distance learning
- Performance and presentation space
- Seasonal outside open-air structure located in a beautifully landscaped area

Drawing and Painting Courses and Facility.

* Large sinks with stainless backsplashes and backsplash mounted faucets
* Include six (6) station computer or laptop lab and color printing capability
* Windows for natural light
* Flexible furniture and work spaces

3-D Design/ Architecture/Sculpture Courses and Facility

* Provide vented ceramic kiln room and storage area separate from classroom.
* Independent controllable room ventilation
* 3-d printing station, laser printing

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* Two (2) industrial sink areas with stainless backsplashes, sediment traps and backsplash mounded faucets
* Furniture, storage, tools, equipment capable supporting a broad range of art materials and techniques

Digital Art

* Twenty (20) station computer lab customized for graphics, media arts, interactive media, and video production
* Large format printers
* Video conferencing for communication and distance learning

STEAM

* 2-d, 3-d, and laser printing
* Model/prototype fabrication

CAD

*Arduino with Max/msp for interactive/robotic experiments

MIDDLE SCHOOL:

Proposed for the middle school include:

- Separate spaces for the Art and Critical Thinking and Design Programs
- An art room with adequate built in storage for 2-d, 3-d projects and resource materials
- At least three (3) industrial, stainless sinks located throughout the room as well as a small hand washing sink
- A small, attached, ventilated room to house a kiln
- Large windows to provide natural light
- A wall area for displaying student work in addition to a separate area in the school for additional display space
- State-of-the-art technology including but not limited to a smart board, high capacity color printer, at least six (6) computer work stations for students, scanner and photo/video editing software
- Furniture which afford flexibility for movement and configuration

8. MUSIC

Current:

HIGH SCHOOL:

Abington High School currently has rehearsal/classroom space for Concert Choir, Concert Band, and Beginner Guitar is shared space often displacing these classes for school assemblies or testing. Because there is little to no storage area, the practice rooms are jammed with materials that are not currently being used, and they are not usable as practice rooms. We currently lack space for the storage of instruments (school owned and student owned).

There is a good sound system for playing examples, and an LCD projector with a large screen for watching performances. There is no permanent white board installed for other teaching opportunities. We also lack a system to record and reproduce student and other performances. The Choral Music Library is located in a closet, and the Instrumental Music Library is in a closet on a different floor.

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Courses offered in 2012-2013: Concert Choir, Concert Band, Electronic Music I, Electronic Music II, Beginner Guitar, and Music in Our Lives

MIDDLE SCHOOL:

Two (2) spaces are dedicated to the music program: one (1) band room and one (1) chorus room. Three (3) music teachers teach Periods 1 and 2 only at Frolio. There are two (2) dedicated music spaces with three (3) music teachers who have full and sometimes oversized classes. We have had to combine classes into very large groups in order to provide music to all students in our school. There is no good assembly space in the school. The gym includes the stage, so we must displace gym classes and equipment for assemblies or performances. The gym/auditorium has poor wireless connection, which negatively impacts performances. During the regular schedule, the stage is used for personal fitness equipment and is unavailable for performing arts. We also utilize the cafeteria for larger groups; however, the cafeteria has only sporadic wireless connection and seating that is cramped, undersized and uncomfortable for the larger middle school student and adults. Performing Arts is not part of the curriculum. It is offered as an after school club by volunteer teachers. When they practice on the stage, they must push the personal fitness equipment to the edges and use just the middle of the stage.

Proposed

HIGH SCHOOL:

The following is proposed for Abington High School:

- Fine Arts Wing
- Performance Auditorium with enough seating to hold graduation, should have an orchestra pit, wing space and fly space, scene shop, storage (costume, sets props), dressing rooms, direct outside access for load in/out adequate lighting and sound, band shell, choral risers, grand piano (storage)
- Band Room with Tiered Seating and instrument storage space sound equipment interactive whiteboard
- Choral Rehearsal Room with tiered seating, interactive whiteboard
- Small Hall for meetings, guest lecturers ,performers, sound, LCD and screen
- Electronic Music Lab with computers and keyboards and interactive whiteboard
- Practice Rooms/Sectional Rehearsal Space (Smart Music Program)
- Instrument storage space
- Music Library choral and instrumental
- Acoustical Tile
- High ceilings
- High quality sound and recording technology
- New chairs and music stands
- Mirrored Dance Studio –for dance classes, dance team, winter guard
- Office space for fine arts teachers - to include computers, printers, copiers

MIDDLE SCHOOL:

One (1) large space (auditorium with stage) will be dedicated to performances, fairs, band practices, and the like. The space will be equipped with state-of-the-art technology for sound and lighting. There will be a dressing area and storage space behind and next to the stage. Wooden floor on stage. Windows in auditorium are coverable. There will be a green room in the space where filming may be done in

collaboration with the local cable station. There will be additional classrooms for music, band and chorus classes. The classrooms will be large enough to accommodate a large group of students. There will be cages for storing musical instruments and a teacher office.

9. PHYSICAL EDUCATION

Current:

HIGH SCHOOL:

- Required one (1) semester every year Grades 9 – 12, five (5) days per week
- Two (2) classes (up to sixty [60] students) run simultaneously in a single shared gymnasium divided by a partition. The physical size of the space is very inadequate.
- The fitness room is located on the opposite end of the building.
- Grades 9 and 10 and Grades 11 and 12 are grouped together.
- Full locker rooms with athletic rooms, team rooms, and PE rooms

MIDDLE SCHOOL:

The gym and auditorium (with stage) is one (1) space (gymatorium) with permanent bleachers and a gym floor. Health and physical education classes are offered. (Grade 7 students – sixty [60] days health/physical education; Grade 8 students – thirty [30] days health/physical education) and full locker rooms with changing areas.

Proposed:

HIGH SCHOOL:

- A Wellness wing to include instruction classrooms, a fitness/weight training facility, office, and conference room
- An indoor track, increased gymnasium size, and safe bleacher seating
- Adequate dedicated physical education storage space
- Adequate lockers, showers, and team rooms
- Five (5) tennis courts
- Outdoor bench and bleacher seating

MIDDLE SCHOOL:

Dedicated gymnasium and fitness rooms which adjoin the health classrooms equipped with both team sports equipment and personal training equipment.
Outside basketball court
Changing stalls in both girls' and boys' locker room

9. SPECIAL EDUCATION

Current

In accordance with Chapter 766 of the Massachusetts General Laws, Federal law, and IDEA, Frolio Middle School's and Abington High School's Special Education Program provides services for qualifying

students who are unable to make effective progress within the general education program. Beyond the inclusive specialized education support continuum for students within the general education classroom, services include academic support, inclusion and self-contained classes. The two (2) sub-separate programs at each school provide a continuum of services for students with cognitive and communication disabilities. Specialized services are provided daily at each school as required by Individual Education Plans (IEP), Section 504 Plans or as part of Response to Intervention (RTI) initiatives. The Common Core is implemented utilizing teaching methods that include but are not limited to co-teaching, small group instruction within the classroom, and monitoring of students during large group sessions. Special education staff works closely with students, parents, and general education teachers to monitor student progress and to modify and support academic programs to meet individual student needs.

Currently, Frolio Middle School and Abington High School support programming for students qualifying for supports through an IEP with the following service models:

- **Consultation:** Special Education and Related Service staff consult with general education staff to support access to curriculum within the general education classrooms and programs.
- **Inclusion Supports:** Students who contend with disabilities are supported within the general education classroom by paraprofessional staff members who work under the direction of general education teachers and consultation from special education teachers.
- **Co-Teaching:** Students access the general curriculum in classes taught by both a general education content area teacher and a special education teacher. These teachers act as equal partners within the classroom to support modified curriculum and accommodations as needed.
- **Replacement:** In rare cases, when general education offerings are not adequate to meet students' intensive needs, content area instruction may occur in a setting outside of the general education classroom and will be taught by a special education teacher.

Frolio Middle School currently has two (2) academic support classrooms, two (2) small special education offices, and one (1) self-contained life skills program consisting of one (1) classroom. There is no designated space for: conference rooms available for special education meetings, testing rooms, work rooms, private locked storage spaces, and service provider rooms (Speech and Language Pathologists, Occupational Therapists, Physical Therapists, Behavior Specialists, Vision Specialists, Reading Specialists, Adaptive Physical Education, English Language Learner Specialists, etc).

Abington High School currently has three (3) academic support classrooms, two (2) small special education offices, and one (1) self-contained life skills program consisting of two (2) classrooms (including a café area equipped with kitchen, sinks, and a computer area). There is no designated space for: conference rooms available for special education meetings, testing rooms, work rooms, private locked storage spaces, and service provider rooms (Speech and Language Pathologists, Occupational Therapists, Physical Therapists, Behavior Specialists, Vision Specialists, Reading Specialists, Adaptive Physical Education, English Language Learner Specialists, etc).

Local review of special education space indicates that the facilities are antiquated and outdated in many ways. Many of the programs are being provided in spaces not originally identified or intended as special education instructional space. The physical layout of the buildings is not conducive to a comprehensive co-teaching model and would be better suited to a more intimate and clustered classroom structure. Individual classrooms have limited electrical outlets and open wall space. This can be a barrier when assistive devices are needed for support of students' access to the curriculum. Instructional space is lacking in quantity and some special education teachers and service providers have no dedicated office or testing space. There is limited meeting space for Team meetings, department meetings, and lack of

conference space to confer with students, teachers, and parents. There is little to no storage space for assessment and instructional materials or supplies and there is no defined de-escalation space.

MIDDLE SCHOOL:

Would propose to include an Assistive Technology Lab (which could be part of the general education computer lab). The software from each textbook series would be installed on to the computers, along with any other software already licensed by the district (i.e., Kurzweil, Dragonspeak, Read Naturally). It would be a place that would be reserved for academic support classes.

Proposed:

MIDDLE SCHOOL:

The proposed building project will afford the special education program to be an integral part of the school community. Ample classroom space, office space, testing space, meeting space, and de-escalation space will be provided in order to best meet the educational needs of all students. This design will afford more opportunities for students and staff to work horizontally and vertically, and to incorporate interdisciplinary ways to fully integrate special needs programming.

The Frolio Middle School will implement a comprehensive co-teaching service model which will allow students to access the general curriculum in classes taught by both a general education content area teacher and a special education teacher. A centralized academic support technology center for both general and special education students will be created to provide academic support and virtual learning projects. Self-contained programs will be strategically located in areas of the building to best support student access. The Life Skills programs (students with cognitive and communication disabilities) will have a newly designed vocational area, semi-private space with a designated de-escalation area to support a more protected and dignified learning space.

In order to address the growing need for student services, the goal is to expand programming to provide access to Alternative Learning Programs that are more project based and have 21st Century vocational exploration opportunities imbedded in them. In addition, programs for students with language based learning disabilities and significant social emotional disabilities will need to be created. Increased counseling services will need to be expanded to address the increasing need for services in the areas of mental illness and substance abuse. This being said, all special education programs need to be located close enough to content and elective general education programming so that inclusive opportunities can be realized when possible.

Professional office and testing spaces will be designated for related service providers in the areas of: Speech and Language Pathologists, Occupational Therapists, Physical Therapists, Behavior Specialists, Vision Specialists, Reading Specialists, Adaptive Physical Education and English Language Learner Specialists, etc.

Lastly, critical to the success of special education programs and related service providers is the ability to observe students in their school environment. Ideally, two (2)-way mirror observation rooms will provide opportunities for both parents, teachers, and consultants who work closely and carefully with the special education population to observe and learn from one another.

MIDDLE SCHOOL:

ABINGTON PUBLIC SCHOOLS
FROLIO MIDDLE SCHOOL PROJECT

The Middle School will include several smaller meeting rooms for tutors and specialists. These rooms may be used for regular teacher/tutor meetings and for small group testing environments. Along with special education teachers, paraeducators and tutors will have shared space in an office with computer access for storing materials, etc.

HIGH SCHOOL:

The proposed building project will afford the special education program to be an integral part of the school community. Ample classroom space, office space, testing space, meeting space, and de-escalation space will be provided in order to best meet the educational needs of all students. This design will afford more opportunities for students and staff to work horizontally and vertically, and to incorporate interdisciplinary ways to fully integrate special needs programming.

Abington High School will continue to support a full continuum of services for students until graduation or for students who are eligible to continue their education until they reach age 22. The continuation of a comprehensive co-teaching service model would allow students to access the general curriculum in classes taught by both a general education content area teacher and a special education teacher. A centralized academic support technology center for both general and special education students will be created to provide academic support and to assist students with credit recovery and college and career readiness projects. Self-contained programs will be strategically located in areas of the building to best support student access. The Life Skills programs (students with cognitive and communication disabilities) will need a newly designed vocational café area, semi-private space with a designated de-escalation area to support a more protected and dignified learning space.

In order to address the growing need for student services, the goal is to expand programming to provide access to Alternative Learning Programs that are more project based and have 21st Century vocational exploration opportunities imbedded in them. In addition, programs for students with language based learning disabilities and significant social emotional disabilities will need to be created. Increased counseling services will need to be expanded to address the increasing need for services in the areas of mental illness and substance abuse. This being said, all special education programs need to be located close enough to content and elective general education programming so that inclusive opportunities can be realized when possible.

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Lastly, critical to the success of special education programs and related service providers is the ability to observe students in their school environment. Ideally, two (2)-way mirror observation rooms will provide opportunities for both parents, teachers, and consultants who work closely and carefully with the special education population to observe and learn from one another.

10. VOCATIONAL EDUCATION

Current:

HIGH SCHOOL:

ABINGTON PUBLIC SCHOOLS
FROLIO MIDDLE SCHOOL PROJECT

- Limited to two (2) semester business courses that provide internship or work experience to Grades 11 and 12 students off campus
- The Special Education department provides vocational individual experience for students on IEP's through North River Collaborative

MIDDLE SCHOOL:

A regular classroom is used for our substantially separate program. which includes a significant vocational component.

Proposed:

HIGH SCHOOL:

- Internship opportunities to include transportation
- Flexible programming to support hybrid off-campus training opportunities
- Integrate project team labs and specialized vocational labs for dual purposes
- In-house daycare for children of staff
- Culinary Department. and school restaurant
- Landscape/grounds maintenance
- Possibility of providing opportunities for high school students to work directly with Pre-K students housed at the high school and part of a Child Care/ Pre-School Vocational Program.

MIDDLE SCHOOL:

A fully equipped vocational classroom complete with a kitchen area.

10. TRANSPORTATION

Mandated Town-Paid Transportation:

Under Massachusetts General Laws. transportation at town expense shall be furnished to all Abington pupils Grades K-6 who live two (2) miles or more from the school they attend. Transportation at town expense is based solely on the student's home address and is only for transportation between the student's home bus stop and the school the student attends. Additionally, transportation shall be provided at town expense for children whose Individualized Education Plan (IEP) requires such transportation or whose physical condition makes such transportation necessary as stated in an IEP.

Non-Mandated Fee-Based Transportation:

The Fee-Based Transportation System provides an option for arranging bus service for students Grades K-6 who live less than two (2) miles from their school and for all students Grades 7-12. There is a provision for a fee waiver. The "Fee Waiver Application Form" must be completed and submitted by July 1st to the Superintendent's Office. This form is available in both the Principal's Office and the Superintendent's Office. Eligibility is subject to the income guidelines and verification. Ridership is not guaranteed as it is dependent on sufficient funding. routing. and available seating.

Two (2) Mile Limit:

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FROLIO MIDDLE SCHOOL PROJECT

The two (2) mile measurement is the shortest vehicular route between the nearest walkway or driveway to the student's residence to the nearest walkway or gateway leading to the front door of the school. If the mileage is in dispute, a "Distance Appeal Form" must be completed and submitted by July 1st to the School Department. This form is available in both the Principal's Office and Superintendent's Office. The distance will be rechecked and a decision made. This decision shall be final. Appeals not properly submitted by July 1st will not be honored. Please note that the shortest vehicular route may change from year to year as new streets open to traffic; therefore, the shortest vehicular route will be based on streets existing as of July 1st of each year. Mileage will not be calculated to or from a daycare provider.

During the month of April students receive a Transportation Packet containing rules and regulations, frequently asked questions, and all pertinent forms. The fee is $255 per student with a $510 family cap. The fee is refundable only if the School Department cannot provide the service. Aside from this exception, and because buses must be contracted in advance, the fee is nonrefundable and will be not be prorated in any manner or for any reason. The seat purchased is not transferable to another route. The application and payment in full must be submitted by July 1st. This payment insures that each child is included on the bus list as routes are developed during the summer. Applications and payments received after July 1st will be considered late and will be honored only if space is available and if there is an existing stop on the route.

Subject to the availability of seats and an existing bus stop, applications for children whose parents/guardians are experiencing an emergency situation will be accepted and processed during the school year. Applications submitted under this provision must be accompanied by a written explanation of the nature of the emergency and any supportive documentation requested by the School Department. A committee comprised of the Chairman of the School Committee, the Superintendent of Schools, and a Principal will review, act on such emergency requests and, if approved, set a prorated fee.

Bus Stops and Routing:

Students K-12 are not entitled to street-by-street or door-to-door pick-up and/or delivery. The School Department will establish common neighborhood bus stops. Timing and routing do not allow for additional bus stops even if the bus passes a particular residence. As it is unknown how many buses will be funded, the length of bus routes may be adversely affected. All efforts will be made to schedule bus routes so that no child is riding for more than one (1) hour per trip.

Proposed:

The District plans to continue its transportation program as outlined above but would hope that the following additional components may be added as part of the proposed project and educational program.

- Late bus for students participating in activities/athletics/supports
- Internship busing
- Dedicated off-campus field trip bus

10. FUNCTIONAL AND SPATIAL RELATIONSHIPS AND ADJACENCIES

Current:

HIGH SCHOOL:

- Fitness room and gym at opposite ends of the building.

ABINGTON PUBLIC SCHOOLS
FROLIO MIDDLE SCHOOL PROJECT

- Department office locations are often floors away from teacher classrooms and/or storage and professional libraries.
- Nurse's office lacks space and privacy.
- Art spaces are a wing apart.
- PKS Music Room is a shared space for all school and town events (bumping Chorus and Band classes out of instructional space).
- Electronic Music lab has portable keyboards to set up, take down and store everyday (no dedicated space) in a common lab.
- Scene shop and storage is in the high school building (or in containers outside) and play production is at the Frolio Middle School.
- Faculty Break Room is on the opposite end of the building from the cafeteria
- All support services are scattered throughout the building based on available space per period each year.
- AP testing is done off campus or in PKS Music Room displacing Chorus and Band instruction.

MIDDLE SCHOOL:

The building consists of three (3) floors, designed in a rectangular formation.

First Floor:
The cafeteria, music rooms, foreign language, health classroom, and dual use conference room/teacher lunch room are located on the first floor. (The teacher's lounge is also used as a teaching space by the specialized reading tutors and the speech and language pathologist.) There are classrooms adjacent to the cafeteria. The first floor gives one the sense of being in the basement, as it is partially underground.

Second Floor:
The building's main entrance, administration, nurse, guidance, gym/auditorium, Grade 7 special education and Grade 7 core teacher classrooms are located are located on the second floor.

Third Floor:
The Grade 8 classrooms, Grade 8 special education, library, and computer lab are located on the third floor.

Proposed:

The Educational Visioning sessions held in April, May, and June of 2013 provided an opportunity for faculty, staff, administrators, building committee members, and community members to discuss many aspects of the proposed educational environment. These sessions are documented in the Summary of the Educational Visioning. Some of the key proposals regarding functional and spatial relationships, as well as key adjacencies are summarized below. They apply to both the middle school and high school environments, and could be extremely successful in a combined 5 through 12 co-located schools environment:

Integration of Topics and Teams – The old traditional approach of segregating subjects by department is detrimental to cross discipline instruction within the educational environment. In order for teachers to be able to facilitate the blending of multiple disciplines of academic instruction, teams must be organized to include multiple subject classrooms into a "Teaching Neighborhood", which includes four (4) general classrooms and a dedicated science classroom. These neighborhoods should also include a dedicated project room, for the development of hands-on, project based learning among team members. Although each neighborhood may not require a teacher planning area, teacher planning and work areas should be an integral part of each team, allowing appropriate space for teachers to collaborate on student assignments.

progress, and cross-discipline instruction. Although organized for efficient interaction within the team, these teams must share a common connection with other teams and be able to casually and easily integrate themselves within the remaining school environment. This "common connection space" may be a central atrium, expanded corridor, or other open circulation element. This concept of neighborhoods applies to both the middle school and the high school. Middle school neighborhoods can be further refined to group 5/6 neighborhoods and 7/8 neighborhoods, creating two schools (a 5/6 school and a 7/8 school) within the same middle school.

Flexible Project and Instructional Space – very few modern business or scientific spaces segregate instruction from application. The modern comprehensive middle school and high school environment must be a flexible space which accommodates both instruction and application. The spaces which are dedicated to project based learning should be highly integrated to the remaining academic classrooms and/or environment.

Entry and Exhibit – The interaction of community members and parents, as well as the impression they receive during their visit to the school is important. Most of the visitors will not have the opportunity to tour throughout all areas of the school, and certainly will not have the opportunity to observe the activities and products of student academic work. The ability for key public areas of the building to exhibit this work, not just statically but also dynamically, is a key component in allowing visitors to experience the learning which is going on throughout the building, without the need to tour deep into the academic zones, which is obviously not practical. The building should place "Education and Student Activity on display for all to absorb". This instills student pride through the exhibit of their work; and can easily be done by providing opportunities for fixed exhibits, video display, or any other practical and functional means. This kind of exhibit opportunity should not be limited to just the displays at entry points accessible to visitors, but should also be inherent within the academic zones, allowing students to present and exhibit their project work to other students. Lockers should be removed from hallways so that these spaces are available to put student work and student activities on display.

It is also important that entry areas exhibit the history and flavor of the Town and school department, through the presentation of artifacts, information, and exhibits.

Beyond STEAM – There has been much talk about STEAM and the need to integrate Science, Technology, Engineering, Arts, and Math within the Academic Environment. The modern 21st Century middle school or high school environments go beyond this, with the goal of integrating these key subjects into real-world business and scientific applications in an effort to help students understand the importance of these topics individually, but to also understand the way they support each other.

Business Community Connections – One of the key components of all successful comprehensive high schools is their ability to integrate the individual programs with their associated professional business applications in the community. Convenient access to the specialized teams by business and scientific leaders within the community is key to this important collaboration. Teacher collaboration areas are also critical to a strong educational environment, with such spaces closely integrated into the academic environment and include the necessary business tools to allow teachers to work, plan, and collaborate.

Media Distribution and Retrieval – The library media center should be a media distribution and retrieval resource which students can utilize throughout the school environment. The functions of the library media center should not be limited to a single location within the building, as students are retrieving data resources constantly, and limiting this retrieval to a single location within the building is no longer efficient. Research can occur any many places throughout the building, and distributing library resources to locations which encourage in lieu of prohibiting use will make for a more dynamic environment. Media broadcasting, video editing, and video productions are all academic endeavors

which may possibly have a link to the media center, but their carefully placement in order to allow them close integration with other disciplines should also be explored.

Educational technology should be integrated seamlessly throughout the educational environment. Campus-wide wireless access is key to creating a flexible environment where students can complete assignments without the confines or boundaries of a fixed computer lab. Labs which are dedicated to specific tasks (like video production or video editing, for example) may be required, but this kind of restrictive specific use space should be created only after thoughtful justification and consideration of a more flexible "Create, research, and explore" environment that provides opportunity for data based activities to be completed in any classroom, or in any part of the building.

Socialization and Learning – Social skills and the need to communicate outside of the project/instructional environment is a key element in promoting positive student development. Students must have the opportunity to socialize with their peers without being confined to the traditional restrictions of a "Cafeteria" where students are herded into a space and directed to function in a stereotypical way. Schools where social dining is distributed throughout the school environment with less restrictions and/or boundaries have proven to promote significantly more student collaboration while simultaneously reducing discipline problems. The student dining area can also play a significant role in parent and community interaction with the school, by providing flexible space which supports presentations, programs, and events. It can serve as one of the primary social hubs of not only the school, but also the entire Abington community.

The School as a Business Incubator –There are many important elements in creating a successful school environment where project-based activity is visually and physically integrated into the core of the school while simultaneously opening themselves to community involvement. It requires re-thinking the "Core" or "Commons" of the school, the definition of "Entry", and all of the necessary aspects of security. The school must operate very much like a business incubator, promoting the necessary collaboration while simultaneously creating the necessary boundaries for staff, administrators, parents, and students.

Indoor/Outdoor Connections – The connection of indoor and outdoor spaces is important to creating a vibrant and energized educational environment. Students can become more engaged in utilizing outdoor space if an effort is made to insure the appropriate visual and physical connection. Outdoor space can be used beyond recreational playfield use and can provide project space, social space, classrooms, study areas, and other support areas for the educational environment. It has a natural integration to many sciences, and should not be ignored as part of a 21st Century educational environment. Such space shall include but not be limited to dining space, study and research areas, student exhibit areas, social areas, art classrooms, and a greenhouse or green roof.

Learning Beyond the School Day - As students become involved in more activities, the time they spend on the academic campus has expanded. These activities include music, performance, athletics, research, science, academics, and more. Many students study after school as they await upcoming practices, performance or activities which involve them or their friends. Providing appropriate spaces for such activities is a key component of the 21st Century academic environment.

Health/Wellness – As more focus is now placed on the mental and physical development of the "whole person" it is critical that key fitness, wellness, and medical facilities be provided within the school environment. Health/wellness classrooms should be adjacent to the gymnasium and should have dedicated equipment. Health services should include multiple rooms for triaging students/staff, including space for sick/well waiting. Appropriate storage, beds, restrooms, seating, and other amenities should be provided.

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Community Use - In small towns like Abington, the schools truly become the center of community use. Gymnasiums, performance theaters, lecture halls, media labs, etc. all become a highly utilized community and educational resource. These facilities are not "extras" to be added if funding allows, but are inherent resources that will serve the student, teachers, administrators, and community members for decades to come. Their careful planning and inclusion, as well as their integration into the community-wide environment are critical to supporting community interaction with the educational community.

SECURITY AND VISUAL ACCESS REQUIREMENTS CURRENT

Security Posture:

1. Access Control System. All exterior doors are lockable, and some are electrified to be locked and unlocked by the access control system. Doors that do not have electrified door hardware are locked and unlocked by keys. Typically there are three (3) sets of main entry doors; all are electrified. The outermost doors are planned to be push pull and unlocked during school hours. They have a card reader if having these doors locked at all times is desired. The inner set of the three (3) doors is planned to always be locked, except for drop-off and pick-up times, where it is planned to be scheduled locked and unlocked during specific times by the access control system. This set of doors has a card reader as well. There is a video entry station at these inner doors, to allow administrative staff to buzz people past them to enter the administrative area. The third set of doors past the administrative area is planned to be locked in a similar fashion as the inner set. Panic buttons, which can trigger a lockdown event in access control (examples of what a lockdown event can trigger are the presentation of a PA announcement, dialing 911, locking all unlocked electrified doors, disabling card readers below a certain access level, sending email alerts, etc.), are typically located in the following areas: administration; Principal's office; certain secretarial staff; SRO office; custodian's office; assistant principal's office. It is important to note that shooting through doors with glass can allow someone to bypass locked doors. Stairwell doors can be pulled off mag holders and programmed locked by access control, securing floors two (2) and three (3). Card access will allow access to floors two (2) and three (3), unless only specific cards are programmed to function during a lockdown. Please note, activation of the fire alarm system will de-energize these stairwell doors for fire safety and they will become unlocked. Exterior doors DO NOT become unlocked upon fire alarm activation. Depending on the IPTV system for the school, it is planned that a lockdown condition in access control shall trigger the IPTV system to turn on all projectors and televisions in the school and present a video file for lockdown purposes. This file will be generated by the owner, and can contain anything deemed appropriate by the owner (lock down procedures, steps to follow, etc.). Please note, this is not to be relied upon as an emergency notification system, but as another means of disseminating information as fast as possible to staff and students.
2. Intrusion Detection System. The intrusion detection system is the burglar alarm system that is armed when the building is unoccupied. This system includes motion detectors in every room on the first floor with windows, door contacts on every exterior door, and door contacts on every interior door shown on the drawings (stairwells, and any room with a card reader). The intrusion system is programmed to dial the central office when an alarm condition is detected, either by a motion detector

or door being forced open. Panic buttons in the administrative area can be programmed to have the intrusion system dial 911 in an emergency during occupied times for lockdown purposes if desired.

3. CCTV System. Cameras are placed around the exterior of the building, the parking lots, hallways, stairwells, the administrative area, café, auditorium, courtyard, gym, lecture hall, library, any alternate HS area, fitness room and gym track area, the ball fields, and all road entrances to the property. A camera is placed on all entry doors into the building. A forced door alarm will call up the video of a camera assigned to cover the door at the security station PC.
4. A bi-directional amplifier and antenna system will be installed for police and fire radios to function within the building without interruption.

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2	Facilities Evaluation
3	Site Evaluations Summary
4	Educational Visioning Summary Document
5	Educational Programming Document
6	Introduction Document
7	Space Summary Documents
8	Options Considered Document
9	Evaluation Matrix
10	Draft of Cost Analysis Options
11	Cost of New School vs. Renovation Document
12	Review of Major Milestones

Introduction
project background

Town of Abington

The Town of Abington is a small residential town bordering the Cities of Brockton and Weymouth and the Towns of Rockland, Holbrook, Whitman, and Hanson. The Town is comprised of mainly residential neighborhoods, with a few big box stores and privately owned businesses.

Project History

On or about October 27, 2006, the Owner submitted a Statement of Interest (Appendix A)to the MSBA for Frolio Middle School. At the July 25, 2012 Board of Directors meeting, the MSBA Board voted to issue an invitation (Appendix B) to the Owner to conduct a feasibility study for this Statement of Interest to identify and study possible solutions and, through a collaborative process with the MSBA, reach a mutually-agreed upon solution.

The following are items noted in the Statement of Interest that the Town of Abington would like to address in this study:

- Elimination of existing severe overcrowding.
- Prevention of the loss of accreditation.
- Replacement, renovation or modernization of the heating system in a schoolhouse to increase energy conservation and decrease energy related costs in the schoolhouse.

During the Spring 2012 Annual Town meeting, and subsequent ballot vote, the Town has secured the funding to complete, in conjunction with the MSBA, this Feasibility Study.

In January of 2013 the Town of Abington selected Ai3 Architects, LLC to conduct a feasibility study of the existing Abington Public Schools. The study was conducted with specific emphasis on assessing the current physical conditions of the existing Frolio Middle School and Abington High School.

The specific goals of this study include a review of the problems identified in the Statement of Interest at the Frolio Middle School and also considers and incorporates grade configurations, facility student populations, operational consolidation, and prospective site locations in development of alternatives and schemes.

The Town and MSBA have agreed on the following student enrollments (Appendix C) for the potential project:

- 665 students in grades 5-8
- 495 students in grades 6-8
- 945 students grade 6-12

The Town of Abington has established a School Building Committee for this project. The Committee consists of 22 members including Government Officials, School District Administrators, School Committee members and Town of Abington residents.

abington public schools

The Abington Public Schools is a PreK-12 district with approximately 2,100 students. Five school buildings are currently being occupied as schools and one building houses the Abington Public Schools Central Office.

Abington High School
Grades 9-12, approximately 550 students
111,831 square feet
Constructed 1962

Woodsdale Elementary School
Grades 5-6, 325 students
56,000 square feet
Constructed 1958

Center School
Grades PreK-K, 165 students
19,800 square feet
Constructed 1939

North School
Central Offices
19,800 square feet
Constructed 1939

Frolio Middle School
Grades 7-8, 350 students
51,729 square feet
Constructed in 1937

Beaver Brook Elementary School
Grades 1-4, 650 students
67,000 square feet
Constructed 1952 with classroom and gymnasium additions 1960

The newest school in the Abington Public School system is the Abington High School at 51 years old. Minor capital projects have been completed within the past 10 years, but have been limited to less than $3.0 million in critical boiler, roof, or window replacement projects. In 2003 a Facility Master Plan was completed which identified numerous facility and educational deficiencies across the entire Abington Public School system. Deficiencies within the 50+ year old facilities were extensive and included but were not limited to lack of educational program opportunities, undersized classrooms and program areas, insufficient accommodations for special education, inadequate student and teacher technology, lack of security systems and controls, inadequate life safety systems, presence of hazardous materials, lack of accessibility (Handicap access), non-compliance with current building codes, inefficient and deteriorated building envelopes, and grossly out-dated and poorly functioning heating, ventilation, plumbing, and electrical systems. At the time of the report, the Building Committee was eager to address these deficiencies but unfortunately the subsequent moratorium on Massachusetts school construction halted the Town and the Committee's ability to address the significant needs inherent in the school facilities. Much time and energy was invested in the 2003 effort, and the inability to address the extensive list of challenges identified in the 2003 Master Plan for many years due to the moratorium caused a significant loss of momentum within the Town.

summary of existing school facilities

Frolio Middle School

The existing Frolio Middle School is located on a very compressed 2.0 acre site surrounded by privately owned property and playfields. This includes privately owned property and recreational fields that have dedicated use and are not available for school expansion or development. The school site is located at 1071 Washington Street, Abington, MA and contains the existing 51,729 s.f school building, insufficient parking, no area for drop-off or pick-up (occurs on street), and minimal landscape areas. The Frolio School was originally constructed in 1937, with most of the 75+ year-old original building, layout, and features still existing on three levels; including a basement level. Classrooms are grossly undersized, and the building's masonry load bearing structural system combined with modern code requirements make modifications to its configuration cost-prohibitive. The limited occupancy (due to building size) of only two grade levels on multiple floors also restricts its use as a modern middle school facility. It is identified in all reports as the building with the most deficiencies and restrictions. The school currently has an enrollment of 350 students in grades 7-8. The included reports indicate that it is not practical or cost-effective to renovate/expand this facility.

Abington High School

The existing Abington High School is located on an expansive 41.0 acre parcel in close proximity to Town Hall and the Abington Public Library; and centrally located within the Town. The 50+ year-old-facility has received minimal educational program improvements in its 50 year history, and only limited capital improvements. Its classrooms and many other program areas are undersized, and it lacks most of the educational program elements associated with a 21st Century high school environment. It lacks the necessary configuration, program areas, and support spaces identified throughout the educational visioning process. Capital improvements at this building include new boilers and a window replacement project, but remaining 50-year-old infrastructure systems require immediate attention. The included reports indicate that it may be a possible candidate for renovation and/or expansion.

As a result of reviewing these two existing buildings and the 2003 Facilities Master Plan Study, the Town of Abington and the MSBA (Massachusetts School Building Authority) have agreed that multiple grade configurations (5-8; 6-8; 6-12; etc.) should be considered as part of addressing the significant deficiencies identified at the Frolio Middle School and the Abington High School.

Although the primary focus of the 2013 Feasibility Study and Schematic Design is to address the significant educational and facility deficiencies in grades 5-12, the need to consider options which address Abington's district wide (PreK-12) concerns remains prevalent; and any potential solution for addressing grades 5-12 must not ignore opportunities to address deficiencies across all grade levels; as deficiencies which were identified across all grade levels in the 2003 report remain unresolved today. The primary deficiency at the elementary schools involves overcrowding. Elementary schools containing grades PK through 6th grade have a capacity of 895 students, and an enrollment of 1,140. The elementary schools also lack sufficient space for the expansion of programs such as full-day Kindergarten. Any solution which allows the 5th and 6th grade population to be accommodated at the middle/high school facilities would alleviate elementary school overcrowding and provide for expanded elementary school programs.

The following elementary schools are currently in use in Abington:

Woodsdale Elementary School

Woodsdale Elementary School was identified in the 2003 Master Plan as having sufficient site amenities, parking, and circulation areas. It could continue to serve as a viable elementary school within the Town with continued capital improvements. At the time of the 2003 study, the primary deficiency at the school was severe overcrowding. This has since been resolved by converting the school from a 3-6 elementary to a 5-6 elementary school, thus reducing the school population by half. Unfortunately, the 3rd and 4th grade students that were removed from Woodsdale were transferred to Beaver Brook Elementary, resulting in severe overcrowding there. Woodsdale contains 56,000sf, including 14 general classrooms and the required support spaces, resulting in a capacity of approximately 315 elementary school students. Although some infrastructure improvements will be required as part of a continued maintenance and capital improvements program, the Woodsdale Elementary School could continue to accommodate two elementary school grade levels into the foreseeable future without significant modifications or expansion.

Beaver Brook Elementary School

Beaver Brook Elementary School was identified in the 2003 Master Plan as having sufficient site amenities, parking, and circulation areas. It could continue to serve as a viable elementary school within the Town with continued capital improvements. At the time of the 2003 study it served as the Early Childhood Center and included grades PK-2. In this configuration, its primary deficiency was overcrowding. The facility has now been converted to an elementary school for grades 1-4, but remains severely overcrowded with 650 students. It contains 67,000sf, including 20 general classrooms and the required support spaces, resulting in a total capacity of 460 elementary school students. This means that capacity is currently exceeded by 190 students, the equivalent of an entire grade level. Although some infrastructure improvements will be required as part of a continued maintenance and capital improvements program, the Beaver Brook Elementary School could provide an educationally strong and viable program for three (not the current four) elementary school grade levels into the foreseeable future without significant modifications or expansion.

Center School

Center School was identified in the 2003 Master Plan as being a very small school (11 classrooms) with limited parking and drop-off areas. It was constructed in 1938, contains approximately 19,800 square feet, and has received no comprehensive renovations to date. All major building systems were identified (In 2003) as requiring updating if the school was to remain in use. Many educational deficiencies were identified in the 2003 study, along with a summary of comprehensive needs for the building envelope and interior. At the time of the 2003 Master Plan, the building was serving grades 3-6. Today, the building has more limited role and provides space for approximately 165 Pre-Kindergarten and Kindergarten students. However, it has received minimal improvements and its continued operation as a very small school which needs significant educational and facility improvements makes it a very inefficient resource.

Although the feasibility study and schematic design is targeted at resolving issues at the

Frolio Middle School and the Abington High School, opportunities for solutions which resolve overcrowding and inefficiency within Abington's elementary schools should not be overlooked. The feasibility study includes exploring the possibility of expanding the middle school population to include grade 5, or grades 5 and 6, not only because of the enhancements this could provide to the middle school but also because this could significantly improve the elementary school environment and increase efficiency in facilities operation throughout the Town.

In order to formulate a plan to address Abington's needs, Ai3 Architects LLC proceeded with the following tasks/process:

- Review 2003 Facility Master Plan
- Document detailed existing conditions at the Abington High School and Frolio Middle School
- Conduct a series of Educational Visioning sessions which included our educational consultant (David Stephen with New Vista Design)
- Document available capacity at existing school buildings across all grade levels
- Summarize educational and facility challenges
- Generate options for resolving educational and facility challenges
- Develop costs for each of the options
- Evaluate options based on their proposed cost versus their value in resolving district-wide educational and facility deficiencies

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11	Cost of New School vs. Renovation Document
12	Review of Major Milestones

Proposed 5-12 Co-Located Middle/High School with Pre-Kindergarten

7.29.13

Proposed Space Summary - Co-Located Middle/High Schools

DRAFT

Frolio Jr. High School	Existing Conditions			PROPOSED 5-8 Middle School: Existing to Remain/Renovated			New			Total			MSBA Guidelines (refer to MSBA Educational Program & Space Standard Guidelines)			
ROOM TYPE	ROOM NFA[1]	# OF RMS	area totals	ROOM NFA[1]	# OF RMS	area totals	ROOM NFA[1]	# OF RMS	area totals	ROOM NFA[1]	# OF RMS	area totals	ROOM NFA[1]	# OF RMS	area totals	Comments
CORE ACADEMIC SPACES			**10,408**			0			**31,530**			**31,530**			**31,480**	
(List classrooms of different sizes separately)																
Classroom - General													950	24	22,800	850 SF min - 950 SF max
English Classroom	716	1	716				850	6	5,100	850	6	5,100				
English Classroom	661	1	661													
English Classroom	693	1	693													
Spanish Classroom	641	1	641													
Spanish Classroom	737	1	737													
Math Classroom	735	1	735				850	6	5,100	850	6	5,100				
Math Classroom	648	1	648													
Math Classroom	716	1	716													
Social Studies	541	1	541													
Geography Classroom	693	1	693													
History Classroom	896	1	896													
Health Classroom	422	1	422													
Small Group Seminar (20-30 seats) / Resource													500	2	1,000	
Science Classroom / Lab							1,200	6	7,200	1,200	6	7,200	1,200	6	7,200	1 period / day / student
Science Classroom	716	2	1,432													
Science Classroom	877	1	877													
Prep Room							80	6	480	80	6	480	6	80	480	
Team/Project Room							575	6	3,450	575	6	3,450				
Hist/Geog							850	6	5,100	850	6	5,100				
SS / Lang							850	6	5,100	850	6	5,100				
SPECIAL EDUCATION			**1,638**			0			**7,050**			**7,050**			**7,550**	
(List classrooms of different sizes separately)																
SPED Classroom	655	1	655													
SPED Classroom	512	1	512													
SPED Classroom	471	1	471													
Self-Contained SPED							850	5	4,250	850	5	4,250	950	5	4,750	assumed 8% of pop. in self-contained SPED
Self-Contained SPED Toilet							60	5	300	60	5	300	60	5	300	
Resource Room							500	3	1,500	500	3	1,500	500	3	1,500	1/2 size Genl. Clrm.
Small Group Room / Reading							500	2	1,000	500	2	1,000	500	2	1,000	1/2 size Genl. Clrm.
ART & MUSIC			**2,791**			0			**1,750**			**1,750**			**3,250**	
Art Classroom							1,200	1	1,200	1,200	1	1,200	1,200	1	1,200	assumed use - 50% population 2 times / week
Art Tech. Classroom	822	1	822													
Art Workroom w/ Storage & kiln							150	1	150	150	1	150	150	1	150	
Band / Chorus - 100 seats							0	0	0	0	0	0	1,500	1	1,500	assumed use - 50% population 2 times / week. See HS program
Chorus	679	1	679													
Band/Music Room	1,290	1	1,290													
Music Practice / Ensemble							200	2	400	200	2	400	200	2	400	
VOCATIONS & TECHNOLOGY			**0**			0			**6,300**			**6,300**			**6,400**	
Tech Clrm. - (E.G. Drafting, Business)													1,200	2	2,400	Assumed use - 25% Population - 5 times/week
Tech Shop - (E.G. Consumer, Wood)													2,000	2	4,000	Assumed use - 25% Population - 5 times/week
Project Based Lab							1,050	6	6,300	1,050	6	6,300				
HEALTH & PHYSICAL EDUCATION			**8,772**			0			**2,400**			**2,400**			**8,400**	
Gymnasium	5,877	1	5,877				0	0	0	0	0	0	6,000	1	6,000	
Gym Storeroom							150	1	150	150	1	150	150	1	150	
Team Room	385	1	385													
Team	48	1	48													
Closet	102	1	102													
Closet	84	1	84													
Closet	38	1	38													
Health Instructor's Office w/ Shower & Toilet							250	1	250	250	1	250	250	1	250	
P.E. Office	85	1	85													
Coach Office	219	1	219													
Locker Rooms - Boys / Girls w/ Toilets							1,000	2	2,000	1,000	2	2,000	1,000	2	2,000	
Girls Locker Room	1,316	1	1,316													
Boys Locker Room	618	1	618													
MEDIA CENTER			**1,868**			0			**0**			**0**			**4,204**	
Media Center / Reading Room							0	0	0	0	0	0	4,204	1	4,204	
Computer Tech. Lab	412	1	412													
Library Computer Lab	1,456	1	1,456													
DINING & FOOD SERVICE			**4,061**			0			**0**			**0**			**9,240**	
Cafetorium / Dining	2,009	1	2,009				0	0	0	0	0	0	4,988	1	4,988	2 seatings - 15SF per seat. See HS program
Stage	838	1	838				0	0	0	0	0	0	1,600	1	1,600	
Chair / Table / Equipment Storage							0	0	0	0	0	0	422	1	422	
Kitchen							0	0	0	0	0	0	1,965	1	1,965	1600 SF for first 300 + 1 SF/Student Add'l
Warming Kitchen	909	1	909													
Staff Lunch Room							0	0	0	0	0	0	266	1	266	20 SF/Occupant
Teacher Lounge	305	1	305													
MEDICAL			**502**			0			**610**			**610**			**610**	
Medical Suite Toilet							60	1	60	60	1	60	60	1	60	
Nurses' Office / Waiting Room	187	1	187				250	1	250	250	1	250	250	1	250	
Examination Room / Resting							100	3	300	100	3	300	100	3	300	
Sch. Psy	315	1	315													
ADMINISTRATION & GUIDANCE			**1,195**			0			**3,466**			**3,466**			**3,465**	
General Office / Waiting Room / Toilet							433	1	433	433	1	433	433	1	433	
Teachers' Mail and Time Room							100	1	100	100	1	100	100	1	100	
Duplicating Room							200	1	200	200	1	200	200	1	200	
Copier	163	1	163													
Records Room							200	1	200	200	1	200	200	1	200	
Principal's Office w/ Conference Area	141	1	141				375	1	375	375	1	375	375	1	375	
Principal's Secretary / Waiting	140	1	140				125	1	125	125	1	125	125	1	125	
Assistant Principal's Office - AP1	199	1	199				150	1	150	150	1	150	150	1	150	
Assistant Principal's Office - AP2							150	1	150	150	1	150	150	1	150	
Supervisory / Spare Office							150	1	150	150	1	150	150	1	150	
Conference Room							350	1	350	350	1	350	350	1	350	
Guidance Office							150	4	600	150	4	600	150	4	600	
Guidance Councelor	123	1	123													
Office	124	1	124													
Behavior Office	174	1	174													
Read. Spec. Office	131	1	131													
Guidance Waiting Room							100	1	100	100	1	100	100	1	100	
Guidance Storeroom							50	1	50	50	1	50	50	1	50	
Teachers' Work Room							483	1	483	483	1	483	483	1	483	
CUSTODIAL & MAINTENANCE			**1,374**			0			**2,140**			**2,140**			**2,140**	
Custodian's Office							150	1	150	150	1	150	150	1	150	
Custodian Office	181	1	181													
Boiler Room	704	1	704													
Custodian's Workshop							250	1	250	250	1	250	250	1	250	
Custodian's Storage							375	1	375	375	1	375	375	1	375	
Recycling Room / Trash							400	1	400	400	1	400	400	1	400	
Receiving and General Supply							322	1	322	322	1	322	322	1	322	
Supply Room	489	1	489													
Storeroom							443	1	443	443	1	443	443	1	443	
Network / Telecom Room							200	1	200	200	1	200	200	1	200	
OTHER			**2,286**			0			**0**			**0**			**0**	
Other *(specify)*																
Storage	102	1	102													
Storage	87	1	87													
Storage	291	1	291													
Storage	313	1	313													
Storage	911	1	911													
Storage	79	1	79													
Storage	42	1	42													
Garage	461	1	461													
Total Building Net Floor Area (NFA)			**34,895**			0			**55,246**			**55,246**			**76,739**	
Proposed Student Capacity / Enrollment															**665**	
Total Building Gross Floor Area (GFA)[2]			**51,729**						**82,869**						**111,245**	
Grossing factor (GFA/NFA)			**1.48**						**1.5**			**0.00**			**1.45**	

Abington High School	Existing Conditions			PROPOSED: Existing to Remain/Renovated			New			Total			MSBA Guidelines (refer to MSBA Educational Program & Space Standard Guidelines)			
ROOM TYPE	ROOM NFA[1]	# OF RMS	area totals	ROOM NFA[1]	# OF RMS	area totals	ROOM NFA[1]	# OF RMS	area totals	ROOM NFA[1]	# OF RMS	area totals	ROOM NFA[1]	# OF RMS	area totals	Comments
CORE ACADEMIC SPACES			**24,321**			0			**23,460**			**23,460**			**23,410**	
(List classrooms of different sizes separately)																
Classroom - General	0	0	0										850	17	14,450	825 SF min - 950 SF max
Teacher Planning			0										100	17	1,700	
Small Group Seminar (20-30 seats)			0										500	1	500	
Science Classroom / Lab	0	0	0										1,440	4	5,760	3 x 85% of 20 Seats-1 per day/Student
Prep Room			0										200	4	800	
Central Chemical Storage Rm			0										200	1	200	
Classroom - English	618	1	618													
Classroom - English	708	3	2,124													
Classroom - English	716	1	716													

Classroom - English	717	1	717													
Classroom - History	705	1	705													
Classroom - History	708	2	1,416													
Classroom - History	713	1	713													
Classroom - Math	708	4	2,832													
Classroom - Math	710	1	710													
Classroom - Math	711	1	711													
Classroom - Math	713	1	713													
Classroom - Math	717	1	717													
Math Office	276	1	276													
Classroom - Foreign Language	705	1	705													
Classroom - Foreign Language	707	1	707													
Classroom - Foreign Language	708	1	708													
Classroom - Foreign Language	711	1	711													
Classroom - Foreign Language	731	1	731													
Language / Language History Office	349	1	349													
Science Classroom / Lab	706	1	706													
Science Classroom / Lab	1,063	1	1,063													
Science Classroom / Lab	1,150	1	1,150													
Science Classroom / Lab	1,200	1	1,200													
Science Classroom / Lab	1,295	1	1,295													
Science Classroom / Lab	1,296	1	1,296													
Science Classroom / Lab Prep/Storage	120	1	120													
Science Classroom / Lab Prep/Storage	261	1	261													
Science Classroom / Lab Prep/Storage	351	1	351													
Team Rooms							450	4	1,800	450	4	1,800				
Math							825	4	3,300	825	4	3,300				
English							825	4	3,300	825	4	3,300				
SS/Lang							825	4	3,300	825	4	3,300				
Hist/Geog							825	4	3,300	825	4	3,300				
Science							1,440	4	5,760	1,440	4	5,760				
Science Prep							200	4	800	200	4	800				
Chem Stor							200	1	200	200	1	200				
Teach Plan							850	2	1,700	850	2	1,700				
SPECIAL EDUCATION			**4,524**			**0**			**4,030**			**4,030**			**4,030**	
(List classrooms of different sizes separately)																
Self-Contained SPED			0				950	3	2,850	950	3	2,850	950	3	2,850	assumed 8% of pop. in self-contained SPED
Self-Contained SPED Toilet			0				60	3	180	60	3	180	60	3	180	
Resource Room			0				500	1	500	500	1	500	500	1	500	1/2 size Genl. Clrm
Small Group Room			0				500	1	500	500	1	500	500	1	500	1/2 size Genl. Clrm
Academic Support	705	1	705													
Co-Op / Life Skills	809	2	1,618													
School Psychologist	322	1	322													
Testing	140	1	140													
Collaborative CR	630	1	630													
Alternative Living - Classroom	705	1	705													
SPED	404	1	404													
ART & MUSIC			**13,042**			**0**			**10,125**			**10,125**			**5,125**	
Art Classroom - 25 seats	705	1	705				1,200	1	1,200	1,200	1	1,200	1,200	1	1,200	Assumed use - 25% Population - 5 times/week
Art Workroom w/ Storage & kiln			0				150	1	150	150	1	150	150	1	150	
Band - 50 - 100 seats	2,880	1	2,880				1,500	1	1,500	1,500	1	1,500	1,500	1	1,500	Assumed use - 25% Population - 5 times/week
Chorus - 50 - 100 seats			0				1,500	1	1,500	1,500	1	1,500	1,500	1	1,500	
Ensemble	120	1	120				200	1	200	200	1	200	200	1	200	
Music Practice			0				75	1	75	75	1	75	75	1	75	
Music Storage			0				500	1	500	500	1	500	500	1	500	
Music Room	3,685	1	3,685				3,000	1	3,000	3,000	1	3,000				
Music Dir	150	1	150													
Art 3-D Lab - Art Studio?	1,068	1	1,068													
Art 2-D Lab - Art Studio?	2,289	1	2,289				2,000	1	2,000	2,000	1	2,000				
Art Comp Lab - Digital Art Lab?	1,077	1	1,077													
Storage	295	1	295													
Drama Storage	504	1	504													
Art Director's Office	269	1	269													
VOCATIONS & TECHNOLOGY			**2,187**			**0**			**6,050**			**6,050**			**3,200**	
Tech Clrm. - (E.G. Drafting, Business)	685	1	685				750	1	750	750	1	750	1,200	1	1,200	Assumed use - 50% Population - 5 times/week
Tech Shop - (E.G. Consumer, Wood)			0										2,000	1	2,000	Assumed use - 50% Population - 5 times/week
School Bank	294	1	294													
School Store	140	1	140				200	1	200	200	1	200				
Academic Lab - Computer Lab	1,068	1	1,068				1,100	1	1,100	1,100	1	1,100				
Project Based Lab							1,000	4	4,000	1,000	4	4,000				
HEALTH & PHYSICAL EDUCATION			**17,178**			**0**			**26,025**			**26,025**			**18,720**	
Gymnasium	9,300	1	9,300				8,500	2	17,000	8,500	2	17,000	12,000	1	12,000	
PE Alternatives							3,000	1	3,000	3,000	1	3,000	3,000	1	3,000	
Gym Storeroom	457	1	457				300	1	300	300	1	300	300	1	300	
Locker Rooms - Boys / Girls w/ Toilets	5,390	1	5,390				2,000	2	4,000	2,000	2	4,000	2,520	1	2,520	5.6 sf/student total
Phys. Ed. Storage	174	1	174				500	1	500	500	1	500	500	1	500	
Athletic Director's Office	167	1	167				150	1	150	150	1	150	150	1	150	
Health Instructor's Office w/ Shower & Toilet							250	1	250	250	1	250	250	1	250	
Health Office	143	1	143													
Health Class	698	1	698				825	1	825	825	1	825				
Weight Room	849	1	849													
MEDIA CENTER			**2,331**			**0**			**3,650**			**3,650**			**3,650**	
Media Center / Reading Room - Library	2,331	1	2,331				3,650	1	3,650	3,650	1	3,650	3,650	1	3,650	
Computer Lab																
AUDITORIUM / DRAMA			**504**			**0**			**10,763**			**10,763**			**5,763**	
Auditorium							7,500	1	7,500	7,500	1	7,500	3,000	1	3,000	2/3 Enrollment @ 10 SF/Seat - 750 seats MAX (750)
Stage							1,600	1	1,600	1,600	1	1,600	1,600	1	1,600	
Auditorium Storage							363	1	363	363	1	363	363	1	363	
Make-up / Dressing Rooms							300	2	600	300	2	600	300	2	600	
Controls / Lighting / Projection							200	1	200	200	1	200	200	1	200	
Drama Set Design	504	1	504				500	1	500	500	1	500				
DINING & FOOD SERVICE			**10,351**			**0**			**11,525**			**11,525**			**5,300**	
Cafeteria / Student Lounge / Break-out	5,277	1	5,277				5,575	1	5,575	5,575	1	5,575	2,250	1	2,250	3 seatings - 15SF per seat
Chair / Table Storage							600	1	600	600	1	600	300	1	300	
Scramble Serving Area							600	1	600	600	1	600	600	1	600	
Kitchen	3,156	1	3,156				2,800	1	2,800	2,800	1	2,800	1,750	1	1,750	1600 SF for first 300 + 1 SF/student Add'l
Staff Lunch Room - Teachers Room	704	1	704				700	1	700	700	1	700	400	1	400	20 SF/Occupant
Greenwave Café	1,214	1	1,214				1,250	1	1,250	1,250	1	1,250				
MEDICAL			**359**			**0**			**610**			**610**			**610**	
Medical Suite Toilet							60	1	60	60	1	60	60	1	60	
Nurses' Office / Waiting Room	359	1	359				250	1	250	250	1	250	250	1	250	
Interview Room							100	1	100	100	1	100	100	1	100	
Examination Room / Resting							100	2	200	100	2	200	100	2	200	
ADMINISTRATION & GUIDANCE			**3,830**			**0**			**3,370**			**3,370**			**3,370**	
General Office / Waiting Room / Toilet							300	1	300	300	1	300	300	1	300	
Teachers' Mail and Time Room							100	1	100	100	1	100	100	1	100	
Duplicating Room							200	1	200	200	1	200	200	1	200	
Records Room							200	1	200	200	1	200	200	1	200	
Principal's Office w/ Conference Area							375	1	375	375	1	375	375	1	375	
Principal's Secretary / Waiting							125	1	125	125	1	125	125	1	125	
Assistant Principal's Office - AP1							150	1	150	150	1	150	150	1	150	
Assistant Principal's Office - AP2													150	0	-	
Supervisory / Spare Office							120	1	120	120	1	120	120	1	120	
Conference Room							450	1	450	450	1	450	450	1	450	
Guidance Office							150	3	450	150	3	450	150	3	450	
Guidance Waiting Room							100	1	100	100	1	100	100	1	100	
Guidance Storeroom							100	1	100	100	1	100	100	1	100	
Career Center							300	1	300	300	1	300	300	1	300	
Records Room							100	1	100	100	1	100	100	1	100	
Teachers' Work Room							300	1	300	300	1	300	300	1	300	
Administration	1,415	1	1,415													
Guidance	720	1	720													
District Offices	677	1	677													
English/Science Office	333	1	333													
In-House Detention	256	1	256													
School Security Office	159	1	159													
Book Storage	270	1	270													
CUSTODIAL & MAINTENANCE			**518**			**0**			**2,075**			**2,075**			**2,075**	
Custodian's Office							150	1	150	150	1	150	150	1	150	
Custodian's Workshop							250	1	250	250	1	250	250	1	250	
Custodian's Storage							375	1	375	375	1	375	375	1	375	
Recycling Room / Trash							400	1	400	400	1	400	400	1	400	
Receiving and General Supply							300	1	300	300	1	300	300	1	300	

Storeroom							400	1	400	400	1	400	400	1	400	
Network / Telecom Room							200	1	200	200	1	200	200	1	200	
Boiler Room																
Servers	190	1	190													
Head End Room	328	1	328													
OTHER			**0**			**0**			**0**			**0**			**0**	
Other (specify)																
Total Building Net Floor Area (NFA)			**79,145**			**0**			**101,683**			**101,683**			**75,253**	
Proposed Student Capacity / Enrollment															**450**	
Total Building Gross Floor Area (GFA)[2]			**111,831**						**152,525**						**101,700**	Should be 121,910gsf
Grossing factor (GFA/NFA)			**1.41**						**1.5**			**0.00**			**1.35**	Grossing factor should be 1.62 for 1115 cap

CORE ACADEMIC SPACES - Pre-K			**3,700**			**0**			**4,400**			**4,400**			**4,800**	
(List classrooms of different sizes separately)																
Pre-Kindergarten w/ toilet	4	925	3,700				4	1,100	4,400	4	1,100	4,400	1,200	4	4,800	[illegible]
ADMINISTRATION & GUIDANCE - Pre-K			**1,057**			**0**			**1,160**			**1,160**			**1,160**	
General Office / Waiting Room / Toilet	1	278	278				1	300	300	1	300	300	300	1	300	
Teachers' Mail and Time Room	1	225	225				1	100	100	1	100	100	100	1	100	
Duplicating Room	1	176	176				1	150	150	1	150	150	150	1	150	
Records Room	1	90	90				1	110	110	1	110	110	110	1	110	
Principal's Office w/ Conference Area	1	190	190				1	375	375	1	375	375	375	1	375	
Principal's Secretary / Waiting	1	98	98				1	125	125	1	125	125	125	1	125	

Total Building Net Floor Area (NFA)			**118,797**			**0**			**162,489**			**162,489**			**157,952**	
Proposed Student Capacity / Enrollment															**1,115**	
Total Building Gross Floor Area (GFA)[2]			**163,560**						**243,734**						**236,928**	
Grossing factor (GFA/NFA)			**1.45**						**1.5**			**0.00**			**1.50**	Average GF for 1115 middle/high

[1] **Individual Room Net Floor Area (NFA)** Includes the net square footage measured from the inside face of the perimeter walls and includes all specific spaces assigned to a particular program area including such spaces as non-communal toilets and storage rooms

[2] **Total Building Gross Floor Area (GFA)** Includes the entire building gross square footage measured from the outside face of exterior walls

Architect Certification

I hereby certify that all of the information provided in this "Proposed Space Summary" is true, complete and accurate and, except as agreed to in writing by the Massachusetts School Building Authority, in accordance with the guidelines, rules, regulations and policies of the Massachusetts School Building Authority to the best of my knowledge and belief. A true statement, made under the penalties of perjury.

Name of Architect Firm: ______________________

Name of Principal Architect: ______________________

Signature of Principal Architect: ______________________

Date: ______________________

Proposed Space Summary - Co-Located Middle/High Schools

Proposed 6-12 Co-Located Middle/High School with Pre-Kindergarten

7.29.13

DRAFT

Frolio Jr. High School	Existing Conditions			PROPOSED 6-8 Middle School									MSBA Guidelines (refer to MSBA Educational Program & Space Standard Guidelines)			
				Existing to Remain/Renovated			New			Total						
ROOM TYPE	ROOM NFA[1]	# OF RMS	area totals	ROOM NFA[1]	# OF RMS	area totals	ROOM NFA[1]	# OF RMS	area totals	ROOM NFA[1]	# OF RMS	area totals	ROOM NFA[1]	# OF RMS	area totals	Comments
CORE ACADEMIC SPACES			**10,408**			**0**			**24,000**			**24,000**			**24,000**	
(List classrooms of different sizes separately)																
Classroom - General							850	1	850	850	1	850	950	18	17,100	850 SF min - 950 SF max
English Classroom	716	1	716				850	4	3,400	850	4	3,400				
English Classroom	661	1	661													
English Classroom	693	1	693													
Spanish Classroom	641	1	641				850	4	3,400	850	4	3,400				
Spanish Classroom	737	1	737													
Math Classroom	735	1	735				850	4	3,400	850	4	3,400				
Math Classroom	648	1	648													
Math Classroom	716	1	716													
Social Studies	541	1	541													
Geography Classroom	693	1	693													
History Classroom	896	1	896													
Health Classroom	422	1	422				850	1	850	850	1	850				
Small Group Seminar (20-30 seats) / Resource													500	1	500	
Science Classroom / Lab							1,200	5	6,000	1,200	5	6,000	1,200	5	6,000	1 period / day / student
Science Classroom	716	2	1,432													
Science Classroom	877	1	877													
Prep Room							80	5	400	80	5	400	80	5	400	
SS/Hist/Geography							850	4	3,400	850	4	3,400				
Team Room							575	4	2,300	575	4	2,300				
SPECIAL EDUCATION			**1,638**			**0**			**5,140**			**5,140**			**5,540**	
(List classrooms of different sizes separately)																
SPED Classroom	655	1	655													
SPED Classroom	512	1	512													
SPED Classroom	471	1	471													
Self-Contained SPED							850	4	3,400	850	4	3,400	950	4	3,800	assumed 8% of pop. in self-contained SPED
Self-Contained SPED Toilet							60	4	240	60	4	240	60	4	240	
Resource Room							500	2	1,000	500	2	1,000	500	2	1,000	1/2 size Gen. Clrm
Small Group Room / Reading							500	1	500	500	1	500	500	1	500	1/2 size Gen. Clrm
ART & MUSIC			**2,791**			**0**			**1,550**			**1,550**			**3,050**	
Art Classroom							1,200	1	1,200	1,200	1	1,200	1,200	1	1,200	assumed use - 50% population 2 times / week
Art Tech. Classroom	822	1	822													
Art Workroom w/ Storage & kiln							150	1	150	150	1	150	150	1	150	
Band / Chorus - 100 seats							0	0	0	0	0	0	1,500	1	1,500	assumed use - 50% population 2 times / week See HS program
Chorus	679	1	679													
Band/Music Room	1,290	1	1,290													
Music Practice / Ensemble							200	1	200	200	1	200	200	1	200	
VOCATIONS & TECHNOLOGY			**0**			**0**			**4,000**			**4,000**			**3,200**	
Tech Clrm. - (E.G. Drafting, Business)													1,200	1	1,200	Assumed use - 25% Population - 5 times/week
Tech Shop - (E.G. Consumer, Wood)													2,000	1	2,000	Assumed use - 25% Population - 5 times/week
Project Based Lab							1,000	4	4,000	1,000	4	4,000				
HEALTH & PHYSICAL EDUCATION			**8,772**			**0**			**2,400**			**2,400**			**8,400**	
Gymnasium	5,877	1	5,877				0	0	0	0	0	0	6,000	1	6,000	See HS program
Gym Storeroom							150	1	150	150	1	150	150	1	150	
Team Room	385	1	385													
Team	48	1	48													
Closet	102	1	102													
Closet	84	1	84													
Closet	38	1	38													
Health Instructor's Office w/ Shower & Toilet							250	1	250	250	1	250	250	1	250	
P.E. Office	85	1	85													
Coach Office	219	1	219													
Locker Rooms - Boys / Girls w/ Toilets							1,000	2	2,000	1,000	2	2,000	1,000	2	2,000	
Girls Locker Room	1,316	1	1,316													
Boys Locker Room	618	1	618													
MEDIA CENTER			**1,868**			**0**			**0**			**0**			**3,226**	
Media Center / Reading Room							0	0	0	0	0	0	3,226	1	3,226	See HS program
Computer Tech. Lab	412	1	412													
Library Computer Lab	1,456	1	1,456													
DINING & FOOD SERVICE			**4,061**			**0**			**0**			**0**			**7,696**	
Cafetorium / Dining	2,009	1	2,009				0	0	0	0	0	0	3,713	1	3,713	2 seatings - 15SF per seat See HS program
Stage	838	1	838				0	0	0	0	0	0	1,600	1	1,600	
Chair / Table / Equipment Storage							0	0	0	0	0	0	365	1	365	
Kitchen							0	0	0	0	0	0	1,795	1	1,795	1600 SF for first 300 + 1 SF/student Add'l
Warming Kitchen	909	1	909													
Staff Lunch Room							0	0	0	0	0	0	224	1	224	20 SF/Occupant
Teacher Lounge	305	1	305													
MEDICAL			**502**			**0**			**510**			**510**			**510**	
Medical Suite Toilet							60	1	60	60	1	60	60	1	60	
Nurses' Office / Waiting Room	187	1	187				250	1	250	250	1	250	250	1	250	
Examination Room / Resting							100	2	200	100	2	200	100	2	200	
Sch. Psy.	315	1	315													
ADMINISTRATION & GUIDANCE			**1,195**			**0**			**2,996**			**2,996**			**2,995**	
General Office / Waiting Room / Toilet							348	1	348	348	1	348	348	1	348	
Teachers' Mail and Time Room							100	1	100	100	1	100	100	1	100	
Duplicating Room							200	1	200	200	1	200	200	1	200	
Copier	163	1	163													
Records Room							200	1	200	200	1	200	200	1	200	
Principal's Office w/ Conference Area	141	1	141				375	1	375	375	1	375	375	1	375	
Principal's Secretary / Waiting	140	1	140				125	1	125	125	1	125	125	1	125	
Assistant Principal's Office - AP1	199	1	199				150	1	150	150	1	150	150	1	150	
Assistant Principal's Office - AP2													150	0	-	
Supervisory / Spare Office							150	1	150	150	1	150	150	1	150	
Conference Room							350	1	350	350	1	350	350	1	350	
Guidance Office							150	3	450	150	3	450	150	3	450	
Guidance Councelor	123	1	123													
Office	124	1	124													
Behavior Office	174	1	174													
Read. Spec. Office	131	1	131													
Guidance Waiting Room							100	1	100	100	1	100	100	1	100	
Guidance Storeroom							50	1	50	50	1	50	50	1	50	
Teachers' Work Room							398	1	398	398	1	398	398	1	398	
CUSTODIAL & MAINTENANCE			**1,374**			**0**			**1,970**			**1,970**			**1,970**	
Custodian's Office							150	1	150	150	1	150	150	1	150	
Custodian Office	181	1	181													
Boiler Room	704	1	704													
Custodian's Workshop							250	1	250	250	1	250	250	1	250	
Custodian's Storage							375	1	375	375	1	375	375	1	375	
Recycling Room / Trash							400	1	400	400	1	400	400	1	400	
Receiving and General Supply							265	1	265	265	1	265	265	1	265	
Supply Room	489	1	489													
Storeroom							330	1	330	330	1	330	330	1	330	
Network / Telecom Room							200	1	200	200	1	200	200	1	200	
OTHER			**2,286**			**0**			**0**			**0**			**0**	
Other *(specify)*																
Storage	102	1	102													
Storage	87	1	87													
Storage	291	1	291													
Storage	313	1	313													
Storage	911	1	911													
Storage	79	1	79													
Storage	42	1	42													
Garage	461	1	461													
Total Building Net Floor Area (NFA)			**34,895**			**0**			**42,566**			**42,566**			**60,587**	
Proposed Student Capacity / Enrollment															**495**	
Total Building Gross Floor Area (GFA)[2]			**51,729**						**63,849**						**90,019**	
Grossing factor (GFA/NFA)			**1.48**						**1.5**			**0.00**			**1.49**	

Abington High School	Existing Conditions			PROPOSED									MSBA Guidelines (refer to MSBA Educational Program & Space Standard Guidelines)			
				Existing to Remain/Renovated			New			Total						
ROOM TYPE	ROOM NFA[1]	# OF RMS	area totals	ROOM NFA[1]	# OF RMS	area totals	ROOM NFA[1]	# OF RMS	area totals	ROOM NFA[1]	# OF RMS	area totals	ROOM NFA[1]	# OF RMS	area totals	Comments
CORE ACADEMIC SPACES			**24,321**			**0**			**23,460**			**23,460**			**23,410**	
(List classrooms of different sizes separately)																
Classroom - General	0	0	0										850	17	14,450	825 SF min - 950 SF max
Teacher Planning			0										100	17	1,700	
Small Group Seminar (20-30 seats)			0										500	1	500	
Science Classroom / Lab	0	0	0										1,440	4	5,760	1,485% sf/20 Seats=1 per lab/student
Prep Room			0										200	4	800	
Central Chemical Storage Rm			0										200	1	200	
Classroom - English	618	1	618													
Classroom - English	708	3	2,124													
Classroom - English	716	1	716													

Classroom - English	717	1	717													
Classroom - History	705	1	705													
Classroom - History	708	2	1,416													
Classroom - History	713	1	713													
Classroom - Math	708	4	2,832													
Classroom - Math	710	1	710													
Classroom - Math	711	1	711													
Classroom - Math	713	1	713													
Classroom - Math	717	1	717													
Math Office	276	1	276													
Classroom - Foreign Language	705	1	705													
Classroom - Foreign Language	707	1	707													
Classroom - Foreign Language	708	1	708													
Classroom - Foreign Language	711	1	711													
Classroom - Foreign Language	731	1	731													
Language / Language History Office	349	1	349													
Science Classroom / Lab	706	1	706													
Science Classroom / Lab	1,063	1	1,063													
Science Classroom / Lab	1,150	1	1,150													
Science Classroom / Lab	1,200	1	1,200													
Science Classroom / Lab	1,295	1	1,295													
Science Classroom / Lab	1,296	1	1,296													
Science Classroom / Lab Prep/Storage	120	1	120													
Science Classroom / Lab Prep/Storage	261	1	261													
Science Classroom / Lab Prep/Storage	351	1	351													
Team Rooms							450	4	1,800	450	4	1,800				
Math							825	4	3,300	825	4	3,300				
English							825	4	3,300	825	4	3,300				
SS/Lang							825	4	3,300	825	4	3,300				
Hist/Geog							825	4	3,300	825	4	3,300				
Science							1,440	4	5,760	1,440	4	5,760				
Science Prep							200	4	800	200	4	800				
Chem Stor							200	1	200	200	1	200				
Teach Plan							850	2	1,700	850	2	1,700				
SPECIAL EDUCATION			**4,524**			**0**			**4,030**			**4,030**			**4,030**	
(List classrooms of different sizes separately)																
Self-Contained SPED			0				950	3	2,850	950	3	2,850	950	3	2,850	assumed 8% of pop. in self-contained SPED
Self-Contained SPED Toilet			0				60	3	180	60	3	180	60	3	180	
Resource Room			0				500	1	500	500	1	500	500	1	500	1/2 size Genl. Clrm
Small Group Room			0				500	1	500	500	1	500	500	1	500	1/2 size Genl. Clrm
Academic Support	705	1	705													
Co-Op / Life Skills	809	2	1,618													
School Psychologist	322	1	322													
Testing	140	1	140													
Collaborative CR	630	1	630													
Alternative Living - Classroom	705	1	705													
SPED	404	1	404													
ART & MUSIC			**13,042**			**0**			**10,125**			**10,125**			**5,125**	
Art Classroom - 25 seats	705	1	705				1,200	1	1,200	1,200	1	1,200	1,200	1	1,200	Assumed use - 25% Population - 5 times/week
Art Workroom w/ Storage & kiln			0				150	1	150	150	1	150	150	1	150	
Band - 50 - 100 seats	2,880	1	2,880				1,500	1	1,500	1,500	1	1,500	1,500	1	1,500	Assumed use - 25% Population - 5 times/week
Chorus - 50 - 100 seats			0				1,500	1	1,500	1,500	1	1,500	1,500	1	1,500	
Ensemble	120	1	120				200	1	200	200	1	200	200	1	200	
Music Practice			0				75	1	75	75	1	75	75	1	75	
Music Storage			0				500	1	500	500	1	500	500	1	500	
Music Room	3,685	1	3,685				3,000	1	3,000	3,000	1	3,000				
Music Dir.	150	1	150													
Art 3-D Lab - Art Studio?	1,068	1	1,068													
Art 2-D Lab - Art Studio?	2,289	1	2,289				2,000	1	2,000	2,000	1	2,000				
Art Comp Lab - Digital Art Lab?	1,077	1	1,077													
Storage	295	1	295													
Drama Storage	504	1	504													
Art Director's Office	269	1	269													
VOCATIONS & TECHNOLOGY			**2,187**			**0**			**6,050**			**6,050**			**3,200**	
Tech Clrm. - (E.G. Drafting, Business)	685	1	685				750	1	750	750	1	750	1,200	1	1,200	Assumed use - 50% Population - 5 times/week
Tech Shop - (E.G. Consumer, Wood)			0										2,000	1	2,000	Assumed use - 50% Population - 5 times/week
School Bank	294	1	294				200	1	200	200	1	200				
School Store	140	1	140				1,100	1	1,100	1,100	1	1,100				
Academic Lab - Computer Lab	1,068	1	1,068				1,000	4	4,000	1,000	4	4,000				
Project Based Lab																
HEALTH & PHYSICAL EDUCATION			**17,178**			**0**			**26,025**			**26,025**			**18,720**	
Gymnasium	9,300	1	9,300				8,500	2	17,000	8,500	2	17,000	12,000	1	12,000	
PE Alternatives							3,000	1	3,000	3,000	1	3,000	3,000	1	3,000	
Gym Storeroom	457	1	457				300	1	300	300	1	300	300	1	300	
Locker Rooms - Boys / Girls w/ Toilets	5,390	1	5,390				2,000	2	4,000	2,000	2	4,000	2,520	1	2,520	5.6 sf/student total
Phys. Ed. Storage	174	1	174				500	1	500	500	1	500	500	1	500	
Athletic Director's Office	167	1	167				150	1	150	150	1	150	150	1	150	
Health Instructor's Office w/ Shower & Toilet							250	1	250	250	1	250	250	1	250	
Health Office	143	1	143													
Health Class	698	1	698				825	1	825	825	1	825				
Weight Room	849	1	849													
MEDIA CENTER			**2,331**			**0**			**3,650**			**3,650**			**3,650**	
Media Center / Reading Room - Library	2,331	1	2,331				3,650	1	3,650	3,650	1	3,650	3,650	1	3,650	
Computer Lab																
AUDITORIUM / DRAMA			**504**			**0**			**10,763**			**10,763**			**5,763**	
Auditorium							7,500	1	7,500	7,500	1	7,500	3,000	1	3,000	2/3 Enrollment @ 10 SF/Seat - 750 seats MAX (750)
Stage							1,600	1	1,600	1,600	1	1,600	1,600	1	1,600	
Auditorium Storage							363	1	363	363	1	363	363	1	363	
Make-up / Dressing Rooms							300	2	600	300	2	600	300	2	600	
Controls / Lighting / Projection							200	1	200	200	1	200	200	1	200	
Drama Set Design	504	1	504				500	1	500	500	1	500				
DINING & FOOD SERVICE			**10,351**			**0**			**10,675**			**10,675**			**5,300**	
Cafeteria / Student Lounge / Break-out	5,277	1	5,277				4,725	1	4,725	4,725	1	4,725	2,250	1	2,250	3 seatings - 15SF per seat
Chair / Table Storage							600	1	600	600	1	600	300	1	300	
Scramble Serving Area							600	1	600	600	1	600	600	1	600	
Kitchen	3,156	1	3,156				2,800	1	2,800	2,800	1	2,800	1,750	1	1,750	1600 SF for first 300 + 1 SF/student Add'l
Staff Lunch Room - Teachers Room	704	1	704				700	1	700	700	1	700	400	1	400	20 SF/Occupant
Greenwave Café	1,214	1	1,214				1,250	1	1,250	1,250	1	1,250				
MEDICAL			**359**			**0**			**610**			**610**			**610**	
Medical Suite Toilet							60	1	60	60	1	60	60	1	60	
Nurses' Office / Waiting Room	359	1	359				250	1	250	250	1	250	250	1	250	
Interview Room							100	1	100	100	1	100	100	1	100	
Examination Room / Resting							100	2	200	100	2	200	100	2	200	
ADMINISTRATION & GUIDANCE			**3,830**			**0**			**3,370**			**3,370**			**3,370**	
General Office / Waiting Room / Toilet							300	1	300	300	1	300	300	1	300	
Teachers' Mail and Time Room							100	1	100	100	1	100	100	1	100	
Duplicating Room							200	1	200	200	1	200	200	1	200	
Records Room							200	1	200	200	1	200	200	1	200	
Principal's Office w/ Conference Area							375	1	375	375	1	375	375	1	375	
Principal's Secretary / Waiting							125	1	125	125	1	125	125	1	125	
Assistant Principal's Office - AP1							150	1	150	150	1	150	150	1	150	
Assistant Principal's Office - AP2													150	0	-	
Supervisory / Spare Office							120	1	120	120	1	120	120	1	120	
Conference Room							450	1	450	450	1	450	450	1	450	
Guidance Office							150	3	450	150	3	450	150	3	450	
Guidance Waiting Room							100	1	100	100	1	100	100	1	100	
Guidance Storeroom							100	1	100	100	1	100	100	1	100	
Career Center							300	1	300	300	1	300	300	1	300	
Records Room							100	1	100	100	1	100	100	1	100	
Teachers' Work Room							300	1	300	300	1	300	300	1	300	
Administration	1,415	1	1,415													
Guidance	720	1	720													
District Offices	677	1	677													
English/Science Office	333	1	333													
In-House Detention	256	1	256													
School Security Office	159	1	159													
Book Storage	270	1	270													
CUSTODIAL & MAINTENANCE			**518**			**0**			**2,075**			**2,075**			**2,075**	
Custodian's Office							150	1	150	150	1	150	150	1	150	
Custodian's Workshop							250	1	250	250	1	250	250	1	250	
Custodian's Storage							375	1	375	375	1	375	375	1	375	
Recycling Room / Trash							400	1	400	400	1	400	400	1	400	
Receiving and General Supply							300	1	300	300	1	300	300	1	300	

Storeroom							400	1	400	400	1	400	400	1	400	
Network / Telecom Room							200	1	200	200	1	200	200	1	200	
Boiler Room																
Servers	190	1	190													
Head End Room	328	1	328													
OTHER			**0**			**0**			**0**			**0**			**0**	
Other (specify)																
Total Building Net Floor Area (NFA)			**79,145**			**0**			**100,833**			**100,833**			**75,253**	
Proposed Student Capacity / Enrollment															**450**	225
Total Building Gross Floor Area (GFA)[2]			**111,831**						**151,250**						**101,700**	
Grossing factor (GFA/NFA)			**1.41**						**1.5**			**0.00**			**1.35**	

CORE ACADEMIC SPACES - Pre-K			**3,700**			**0**			**4,400**			**4,400**			**4,800**	
(List classrooms of different sizes separately)																
Pre-Kindergarten w/ toilet	4	925	3,700			4	1,100	4,400	4	1,100	4,400	1,200	4	4,800	1,100 SF min - 1,300 SF max
ADMINISTRATION & GUIDANCE - Pre-K			**1,057**			**0**			**1,160**			**1,160**			**1,160**	
General Office / Waiting Room / Toilet	1	278	278			1	300	300	1	300	300	300	1	300	
Teachers' Mail and Time Room	1	225	225			1	100	100	1	100	100	100	1	100	
Duplicating Room	1	176	176			1	150	150	1	150	150	150	1	150	
Records Room	1	90	90			1	110	110	1	110	110	110	1	110	
Principal's Office w/ Conference Area	1	190	190			1	375	375	1	375	375	375	1	375	
Principal's Secretary / Waiting	1	98	98			1	125	125	1	125	125	125	1	125	

Total Building Net Floor Area (NFA)			**118,797**			**0**			**148,959**			**148,959**			**141,800**	
Proposed Student Capacity / Enrollment															**945**	210
Total Building Gross Floor Area (GFA)[2]			**163,560**						**223,439**						**214,119**	
Grossing factor (GFA/NFA)			**1.45**						**1.5**			**0.00**			**1.51**	Average GF for 945 middle/high

[1] **Individual Room Net Floor Area (NFA)** Includes the net square footage measured from the inside face of the perimeter walls and includes all specific spaces assigned to a particular program area including such spaces as non-communal toilets and storage rooms.

[2] **Total Building Gross Floor Area (GFA)** Includes the entire building gross square footage measured from the outside face of exterior walls

Architect Certification

I hereby certify that all of the information provided in this "Proposed Space Summary" is true, complete and accurate and, except as agreed to in writing by the Massachusetts School Building Authority, in accordance with the guidelines, rules, regulations and policies of the Massachusetts School Building Authority to the best of my knowledge and belief. A true statement, made under the penalties of perjury.

Name of Architect Firm: _____

Name of Principal Architect: _____

Signature of Principal Architect: _____

Date: _____

Proposed Space Summary - Middle Schools

Proposed 5-8 Middle School

DRAFT

7.2.13

Frolio Jr. High School

ROOM TYPE	Existing Conditions: ROOM NFA[1]	Existing Conditions: # OF RMS	Existing Conditions: area totals	PROPOSED 5-8 Middle School — Existing to Remain/Renovated: ROOM NFA[1]	Existing to Remain/Renovated: # OF RMS	Existing to Remain/Renovated: area totals	New: ROOM NFA[1]	New: # OF RMS	New: area totals	Total: ROOM NFA[1]	Total: # OF RMS	Total: area totals	MSBA Guidelines (refer to MSBA Educational Program & Space Standard Guidelines): ROOM NFA[1]	MSBA Guidelines: # OF RMS	MSBA Guidelines: area totals	MSBA Guidelines: Comments
CORE ACADEMIC SPACES			**10,408**			**0**			**31,530**			**31,530**			**31,480**	
(List classrooms of different sizes separately)																
Classroom - General													950	24	22,800	150 SF min - 950 SF max
English Classroom	716	1	716				850	6	5,100	850	6	5,100				
English Classroom	661	1	661													
English Classroom	693	1	693													
Spanish Classroom	641	1	641													
Spanish Classroom	737	1	737													
Math Classroom	735	1	735				850	6	5,100	850	6	5,100				
Math Classroom	648	1	648													
Math Classroom	716	1	716													
Social Studies	541	1	541													
Geography Classroom	693	1	693													
History Classroom	896	1	896													
Health Classroom	422	1	422													
Small Group Seminar (20-30 seats) / Resource													500	2	1,000	
Science Classroom / Lab							1,200	6	7,200	1,200	6	7,200	1,200	6	7,200	1 period / day / student
Science Classroom	716	2	1,432													
Science Classroom	877	1	877													
Prep Room							80	6	480	80	6	480	6	80	480	
Team/Project Room							575	6	3,450	575	6	3,450				
Hist/Geog							850	6	5,100	850	6	5,100				
SS / Lang							850	6	5,100	850	6	5,100				
SPECIAL EDUCATION			**1,638**			**0**			**7,050**			**7,050**			**7,550**	
(List classrooms of different sizes separately)																
SPED Classroom	655	1	655													
SPED Classroom	512	1	512													
SPED Classroom	471	1	471													
Self-Contained SPED							850	5	4,250	850	5	4,250	950	5	4,750	assumed 8% of pop. in self-contained SPED
Self-Contained SPED Toilet							60	5	300	60	5	300	60	5	300	
Resource Room							500	3	1,500	500	3	1,500	500	3	1,500	1/2 size Gen' Clrm
Small Group Room / Reading							500	2	1,000	500	2	1,000	500	2	1,000	1/2 size Gen' Clrm
ART & MUSIC			**2,791**			**0**			**3,250**			**3,250**			**3,250**	
Art Classroom							1,200	1	1,200	1,200	1	1,200	1,200	1	1,200	assumed use - 50% population 2 times / week
Art Tech. Classroom	822	1	822													
Art Workroom w/ Storage & kiln							150	1	150	150	1	150	150	1	150	
Band / Chorus - 100 seats							1,500	1	1,500	1,500	1	1,500	1,500	1	1,500	assumed use - 50% population 2 times / week
Chorus	679	1	679													
Band/Music Room	1,290	1	1,290				200	2	400	200	2	400	200	2	400	
Music Practice / Ensemble																
VOCATIONS & TECHNOLOGY			**0**			**0**			**6,300**			**6,300**			**6,400**	
Tech Clrm. - (E.G. Drafting, Business)													1,200	2	2,400	Assumed use - 25% Population - 5 times/week
Tech Shop - (E.G. Consumer, Wood)													2,000	2	4,000	Assumed use - 25% Population - 5 times/week
Project Based Lab							1,050	6	6,300	1,050	6	6,300				
HEALTH & PHYSICAL EDUCATION			**8,772**			**0**			**9,900**			**9,900**			**8,400**	
Gymnasium	5,877	1	5,877				7,500	1	7,500	7,500	1	7,500	6,000	1	6,000	
Gym Storeroom							150	1	150	150	1	150	150	1	150	
Team Room	385	1	385													
Team	48	1	48													
Closet	102	1	102													
Closet	84	1	84													
Closet	38	1	38													
Health Instructor's Office w/ Shower & Toilet							250	1	250	250	1	250	250	1	250	
P.E. Office	85	1	85													
Coach Office	219	1	219													
Locker Rooms - Boys / Girls w/ Toilets							1,000	2	2,000	1,000	2	2,000	1,000	2	2,000	
Girls Locker Room	1,316	1	1,316													
Boys Locker Room	618	1	618													
MEDIA CENTER			**1,868**			**0**			**4,204**			**4,204**			**4,204**	
Media Center / Reading Room							4,204	1	4,204	4,204	1	4,204	4,204	1	4,204	
Computer Tech. Lab	412	1	412													
Library Computer Lab	1,456	1	1,456													
DINING & FOOD SERVICE			**4,061**			**0**			**9,241**			**9,241**			**9,240**	
Cafetorium / Dining	2,009	1	2,009				4,988	1	4,988	4,988	1	4,988	4,988	1	4,988	2 seatings - 1 SF per seat
Stage	838	1	838				1,600	1	1,600	1,600	1	1,600	1,600	1	1,600	
Chair / Table / Equipment Storage							422	1	422	422	1	422	422	1	422	
Kitchen							1,965	1	1,965	1,965	1	1,965	1,965	1	1,965	1600 SF for first 300 + 1 SF/student Add'l
Warming Kitchen	909	1	909													
Staff Lunch Room							266	1	266	266	1	266	266	1	266	20 SF/Occupant
Teacher Lounge	305	1	305													
MEDICAL			**502**			**0**			**610**			**610**			**610**	
Medical Suite Toilet							60	1	60	60	1	60	60	1	60	
Nurses' Office / Waiting Room	187	1	187				250	1	250	250	1	250	250	1	250	
Examination Room / Resting							100	3	300	100	3	300	100	3	300	
Sch. Psy.	315	1	315													
ADMINISTRATION & GUIDANCE			**1,195**			**0**			**3,466**			**3,466**			**3,465**	
General Office / Waiting Room / Toilet							433	1	433	433	1	433	433	1	433	
Teachers' Mail and Time Room							100	1	100	100	1	100	100	1	100	
Duplicating Room							200	1	200	200	1	200	200	1	200	
Copier	163	1	163													
Records Room							200	1	200	200	1	200	200	1	200	
Principal's Office w/ Conference Area	141	1	141				375	1	375	375	1	375	375	1	375	
Principal's Secretary / Waiting	140	1	140				125	1	125	125	1	125	125	1	125	
Assistant Principal's Office - AP1	199	1	199				150	1	150	150	1	150	150	1	150	
Assistant Principal's Office - AP2							150	1	150	150	1	150	150	1	150	
Supervisory / Spare Office							150	1	150	150	1	150	150	1	150	
Conference Room							350	1	350	350	1	350	350	1	350	
Guidance Office							150	4	600	150	4	600	150	4	600	
Guidance Councelor	123	1	123													
Office	124	1	124													
Behavior Office	174	1	174													
Read. Spec. Office	131	1	131													
Guidance Waiting Room							100	1	100	100	1	100	100	1	100	
Guidance Storeroom							50	1	50	50	1	50	50	1	50	
Teachers' Work Room							483	1	483	483	1	483	483	1	483	
CUSTODIAL & MAINTENANCE			**1,374**			**0**			**2,140**			**2,140**			**2,140**	
Custodian's Office							150	1	150	150	1	150	150	1	150	
Custodian Office	181	1	181													
Boiler Room	704	1	704													
Custodian's Workshop							250	1	250	250	1	250	250	1	250	
Custodian's Storage							375	1	375	375	1	375	375	1	375	
Recycling Room / Trash							400	1	400	400	1	400	400	1	400	
Receiving and General Supply							322	1	322	322	1	322	322	1	322	
Supply Room	489	1	489													
Storeroom							443	1	443	443	1	443	443	1	443	
Network / Telecom Room							200	1	200	200	1	200	200	1	200	
OTHER			**2,286**			**0**			**0**			**0**			**0**	
Other *(specify)*																
Storage	102	1	102													
Storage	87	1	87													
Storage	291	1	291													
Storage	313	1	313													
Storage	911	1	911													
Storage	79	1	79													
Storage	42	1	42													
Garage	461	1	461													
Total Building Net Floor Area (NFA)			**34,895**			**0**			**77,691**			**77,691**			**76,739**	
Proposed Student Capacity / Enrollment															**665**	
Total Building Gross Floor Area (GFA)[2]			51,729						116,537						**111,245**	
Grossing factor (GFA/NFA)			**1.48**						**1.5**			**0.00**			**1.45**	

[1] **Individual Room Net Floor Area (NFA)** Includes the net square footage measured from the inside face of the perimeter walls and includes all specific spaces assigned to a particular program area including such spaces as non-communal toilets and storage rooms.

[2] **Total Building Gross Floor Area (GFA)** Includes the entire building gross square footage measured from the outside face of exterior walls

Architect Certification

I hereby certify that all of the information provided in this "Proposed Space Summary" is true, complete and accurate and, except as agreed to in writing by the Massachusetts School Building Authority, in accordance with the guidelines, rules, regulations and policies of the Massachusetts School Building Authority to the best of my knowledge and belief. A true statement, made under the penalties of perjury.

Name of Architect Firm: _____

Name of Principal Architect: _____

Signature of Principal Architect: _____

Date: _____

Proposed Space Summary - Middle Schools

Proposed 6-8 Middle School

DRAFT

7.2.13

Frolio Jr. High School	Existing Conditions			PROPOSED 6-8 Middle School								MSBA Guidelines (refer to MSBA Educational Program & Space Standard Guidelines)			
				Existing to Remain/Renovated			New			Total					
ROOM TYPE	ROOM NFA[1]	# OF RMS	area totals	ROOM NFA[1]	# OF RMS	area totals,	ROOM NFA[1]	# OF RMS	area totals	ROOM NFA[1]	# OF RMS	area totals	ROOM NFA[1]	# OF RMS	area totals	Comments
CORE ACADEMIC SPACES			**10,408**			0			**24,000**			**24,000**			**24,000**	
(List classrooms of different sizes separately)																
Classroom - General							850	1	850	850	1	850	950	18	17,100	850 SF min - 950 SF max
English Classroom	716	1	716				850	4	3,400	850	4	3,400				
English Classroom	661	1	661													
English Classroom	693	1	693				850	4	3,400	850	4	3,400				
Spanish Classroom	641	1	641													
Spanish Classroom	737	1	737				850	4	3,400	850	4	3,400				
Math Classroom	735	1	735													
Math Classroom	648	1	648													
Math Classroom	716	1	716													
Social Studies	541	1	541													
Geography Classroom	693	1	693													
History Classroom	896	1	896				850	1	850	850	1	850	500	1	500	
Health Classroom	422	1	422				1,200	5	6,000	1,200	5	6,000	1,200	5	6,000	1 period / day / student
Small Group Seminar (20-30 seats) / Resource																
Science Classroom / Lab							80	5	400	80	5	400	80	5	400	
Science Classroom	716	2	1,432				850	4	3,400	850	4	3,400				
Science Classroom	877	1	877				575	4	2,300	575	4	2,300				
Prep Room																
SS/Hist/Geography																
Team Room																
SPECIAL EDUCATION			**1,638**			0			**5,140**			**5,140**			**5,540**	
(List classrooms of different sizes separately)																
SPED Classroom	655	1	655													
SPED Classroom	512	1	512													
SPED Classroom	471	1	471													
Self-Contained SPED							850	4	3,400	850	4	3,400	950	4	3,800	assumed 8% of pop. in self-contained SPED
Self-Contained SPED Toilet							60	4	240	60	4	240	60	4	240	
Resource Room							500	2	1,000	500	2	1,000	500	2	1,000	1/2 size Gen' Clrm.
Small Group Room / Reading							500	1	500	500	1	500	500	1	500	1/2 size Gen' Clrm.
ART & MUSIC			**2,791**			0			**3,050**			**3,050**			**3,050**	
Art Classroom							1,200	1	1,200	1,200	1	1,200	1,200	1	1,200	assumed use - 50% population 2 times / week
Art Tech. Classroom	822	1	822													
Art Workroom w/ Storage & kiln							150	1	150	150	1	150	150	1	150	
Band / Chorus - 100 seats							1,500	1	1,500	1,500	1	1,500	1,500	1	1,500	assumed use - 50% population 2 times / week
Chorus	679	1	679													
Band/Music Room	1,290	1	1,290				200	1	200	200	1	200	200	1	200	
Music Practice / Ensemble																
VOCATIONS & TECHNOLOGY			**0**			0			**4,000**			**4,000**			**3,200**	
Tech Clrm. - (E.G. Drafting, Business)													1,200	1	1,200	Assumed use - 25% Population - 5 times/week
Tech Shop - (E.G. Consumer, Wood)							1,000	4	4,000	1,000	4	4,000	2,000	1	2,000	Assumed use - 25% Population - 5 times/week
Project Based Lab																
HEALTH & PHYSICAL EDUCATION			**8,772**			0			**9,900**			**9,900**			**8,400**	
Gymnasium	5,877	1	5,877				7,500	1	7,500	7,500	1	7,500	6,000	1	6,000	
Gym Storeroom							150	1	150	150	1	150	150	1	150	
Team Room	385	1	385													
Team	48	1	48													
Closet	102	1	102													
Closet	84	1	84													
Closet	38	1	38													
Health Instructor's Office w/ Shower & Toilet							250	1	250	250	1	250	250	1	250	
P.E. Office	85	1	85													
Coach Office	219	1	219													
Locker Rooms - Boys / Girls w/ Toilets							1,000	2	2,000	1,000	2	2,000	1,000	2	2,000	
Girls Locker Room	1,316	1	1,316													
Boys Locker Room	618	1	618													
MEDIA CENTER			**1,868**			0			**3,226**			**3,226**			**3,226**	
Media Center / Reading Room							3,226	1	3,226	3,226	1	3,226	3,226	1	3,226	
Computer Tech. Lab	412	1	412													
Library Computer Lab	1,456	1	1,456													
DINING & FOOD SERVICE			**4,061**			0			**7,697**			**7,697**			**7,696**	
Cafetorium / Dining	2,009	1	2,009				3,713	1	3,713	3,713	1	3,713	3,713	1	3,713	2 seatings - 15SF per seat
Stage	838	1	838				1,600	1	1,600	1,600	1	1,600	1,600	1	1,600	
Chair / Table / Equipment Storage							365	1	365	365	1	365	365	1	365	
Kitchen							1,795	1	1,795	1,795	1	1,795	1,795	1	1,795	1600 SF for first 300 + 1 SF/student Add'l
Warming Kitchen	909	1	909													
Staff Lunch Room							224	1	224	224	1	224	224	1	224	20 SF/Occupant
Teacher Lounge	305	1	305													
MEDICAL			**502**			0			**510**			**510**			**510**	
Medical Suite Toilet							60	1	60	60	1	60	60	1	60	
Nurses' Office / Waiting Room	187	1	187				250	1	250	250	1	250	250	1	250	
Examination Room / Resting							100	2	200	100	2	200	100	2	200	
Sch. Psy.	315	1	315													
ADMINISTRATION & GUIDANCE			**1,195**			0			**2,996**			**2,996**			**2,995**	
General Office / Waiting Room / Toilet							348	1	348	348	1	348	348	1	348	
Teachers' Mail and Time Room							100	1	100	100	1	100	100	1	100	
Duplicating Room							200	1	200	200	1	200	200	1	200	
Copier	163	1	163													
Records Room							200	1	200	200	1	200	200	1	200	
Principal's Office w/ Conference Area	141	1	141				375	1	375	375	1	375	375	1	375	
Principal's Secretary / Waiting	140	1	140				125	1	125	125	1	125	125	1	125	
Assistant Principal's Office - AP1	199	1	199				150	1	150	150	1	150	150	1	150	
Assistant Principal's Office - AP2													150	0	-	
Supervisory / Spare Office							150	1	150	150	1	150	150	1	150	
Conference Room							350	1	350	350	1	350	350	1	350	
Guidance Office							150	3	450	150	3	450	150	3	450	
Guidance Councelor	123	1	123													
Office	124	1	124													
Behavior Office	174	1	174													
Read. Spec. Office	131	1	131													
Guidance Waiting Room							100	1	100	100	1	100	100	1	100	
Guidance Storeroom							50	1	50	50	1	50	50	1	50	
Teachers' Work Room							398	1	398	398	1	398	398	1	398	
CUSTODIAL & MAINTENANCE			**1,374**			0			**1,970**			**1,970**			**1,970**	
Custodian's Office							150	1	150	150	1	150	150	1	150	
Custodian Office	181	1	181													
Boiler Room	704	1	704													
Custodian's Workshop							250	1	250	250	1	250	250	1	250	
Custodian's Storage							375	1	375	375	1	375	375	1	375	
Recycling Room / Trash							400	1	400	400	1	400	400	1	400	
Receiving and General Supply							265	1	265	265	1	265	265	1	265	
Supply Room	489	1	489													
Storeroom							330	1	330	330	1	330	330	1	330	
Network / Telecom Room							200	1	200	200	1	200	200	1	200	
OTHER			**2,286**			0			**0**			**0**			**0**	
Other *(specify)*																
Storage	102	1	102													
Storage	87	1	87													
Storage	291	1	291													
Storage	313	1	313													
Storage	911	1	911													
Storage	79	1	79													
Storage	42	1	42													
Garage	461	1	461													
Total Building Net Floor Area (NFA)			**34,895**			0			**62,489**			**62,489**			**60,587**	
Proposed Student Capacity / Enrollment															**495**	
Total Building Gross Floor Area (GFA)[2]			51,729						93,734						**90,019**	
Grossing factor (GFA/NFA)			**1.48**						**1.5**			**0.00**			**1.49**	

[1] **Individual Room Net Floor Area (NFA)** Includes the net square footage measured from the inside face of the perimeter walls and includes all specific spaces assigned to a particular program area including such spaces as non-communal toilets and storage rooms.

[2] **Total Building Gross Floor Area (GFA)** Includes the entire building gross square footage measured from the outside face of exterior walls.

Architect Certification

I hereby certify that all of the information provided in this "Proposed Space Summary" is true, complete and accurate and, except as agreed to in writing by the Massachusetts School Building Authority, in accordance with the guidelines, rules, regulations and policies of the Massachusetts School Building Authority to the best of my knowledge and belief. A true statement, made under the penalties of perjury.

Name of Architect Firm: _____

Name of Principal Architect: _____

Signature of Principal Architect: _____

Date: _____

Proposed Space Summary - Co-Located Middle/High Schools

Proposed 7-12 Co-Located Middle/High School with Pre-Kindergarten

8.29.13

DRAFT

Frolio Jr. High School	Existing Conditions		
ROOM TYPE	ROOM NFA[1]	# OF RMS	area totals
CORE ACADEMIC SPACES			**10,408**
(List classrooms of different sizes separately)			
Classroom - General			
English Classroom	716	1	716
English Classroom	661	1	661
English Classroom	693	1	693
Spanish Classroom	641	1	641
Spanish Classroom	737	1	737
Math Classroom	735	1	735
Math Classroom	648	1	648
Math Classroom	716	1	716
Social Studies	541	1	541
Geography Classroom	693	1	693
History Classroom	896	1	896
Health Classroom	422	1	422
Small Group Seminar (20-30 seats) / Resource			
Science Classroom / Lab			
Science Classroom	716	2	1,432
Science Classroom	877	1	877
Prep Room			
SS/Hist/Geography			
Team Room			
SPECIAL EDUCATION			**1,638**
(List classrooms of different sizes separately)			
SPED Classroom	655	1	655
SPED Classroom	512	1	512
SPED Classroom	471	1	471
Self-Contained SPED			
Self-Contained SPED Toilet			
Resource Room			
Small Group Room / Reading			
ART & MUSIC			**2,791**
Art Classroom			
Art Tech. Classroom	822	1	822
Art Workroom w/ Storage & kiln			
Band / Chorus - 100 seats			
Chorus	679	1	679
Band/Music Room	1,290	1	1,290
Music Practice / Ensemble			
VOCATIONS & TECHNOLOGY			**0**
Tech Clrm. - (E.G. Drafting, Business)			
Tech Shop - (E.G. Consumer, Wood)			
Project Based Lab			
HEALTH & PHYSICAL EDUCATION			**8,772**
Gymnasium	5,877	1	5,877
Gym Storeroom			
Team Room	385	1	385
Team	48	1	48
Closet	102	1	102
Closet	84	1	84
Closet	38	1	38
Health Instructor's Office w/ Shower & Toilet			
P.E. Office	85	1	85
Coach Office	219	1	219
Locker Rooms - Boys / Girls w/ Toilets			
Girls Locker Room	1,316	1	1,316
Boys Locker Room	618	1	618
MEDIA CENTER			**1,868**
Media Center / Reading Room			
Computer Tech. Lab	412	1	412
Library Computer Lab	1,456	1	1,456
DINING & FOOD SERVICE			**4,061**
Cafetorium / Dining	2,009	1	2,009
Stage	838	1	838
Chair / Table / Equipment Storage			
Kitchen			
Warming Kitchen	909	1	909
Staff Lunch Room			
Teacher Lounge	305	1	305
MEDICAL			**502**
Medical Suite Toilet			
Nurses' Office / Waiting Room	187	1	187
Examination Room / Resting			
Sch. Psy.	315	1	315
ADMINISTRATION & GUIDANCE			**1,195**
General Office / Waiting Room / Toilet			
Teachers' Mail and Time Room			
Duplicating Room			
Copier	163	1	163
Records Room			
Principal's Office w/ Conference Area	141	1	141
Principal's Secretary / Waiting	140	1	140
Assistant Principal's Office - AP1	199	1	199
Assistant Principal's Office - AP2			
Supervisory / Spare Office			
Conference Room			
Guidance Office			
Guidance Councelor	123	1	123
Office	124	1	124
Behavior Office	174	1	174
Read. Spec. Office	131	1	131
Guidance Waiting Room			
Guidance Storeroom			
Teachers' Work Room			
CUSTODIAL & MAINTENANCE			**1,374**
Custodian's Office			
Custodian Office	181	1	181
Boiler Room	704	1	704
Custodian's Workshop			
Custodian's Storage			
Recycling Room / Trash			
Receiving and General Supply			
Supply Room	489	1	489
Storeroom			
Network / Telecom Room			
OTHER			**2,286**
Other *(specify)*			
Storage	102	1	102
Storage	87	1	87
Storage	291	1	291
Storage	313	1	313
Storage	911	1	911
Storage	79	1	79
Storage	42	1	42
Garage	461	1	461
Total Building Net Floor Area (NFA)			**34,895**
Proposed Student Capacity / Enrollment			
Total Building Gross Floor Area (GFA)[2]			**51,729**
Grossing factor (GFA/NFA)			**1.48**

PROPOSED 7-8 Middle School								
Existing to Remain/Renovated			New			Total		
ROOM NFA[1]	# OF RMS	area totals	ROOM NFA[1]	# OF RMS	area totals	ROOM NFA[1]	# OF RMS	area totals
		0			**16,615**			**16,615**
			850	3	2,550	850	3	2,550
			850	3	2,550	850	3	2,550
			850	3	2,550	850	3	2,550
			850	1	850	850	1	850
			1,200	3	3,600	1,200	3	3,600
			80	3	240	80	3	240
			850	3	2,550	850	3	2,550
			575	3	1,725	575	3	1,725
		0			**4,230**			**4,230**
			850	3	2,550	850	3	2,550
			60	3	180	60	3	180
			500	2	1,000	500	2	1,000
			500	1	500	500	1	500
		0			**1,550**			**1,550**
			1,200	1	1,200	1,200	1	1,200
			150	1	150	150	1	150
			0	0	0	0	0	0
			200	1	200	200	1	200
		0			**3,000**			**3,000**
			1,000	3	3,000	1,000	3	3,000
		0			**2,400**			**2,400**
			0	0	0	0	0	0
			150	1	150	150	1	150
			250	1	250	250	1	250
			1,000	2	2,000	1,000	2	2,000
		0			**0**			**0**
			0	0	0	0	0	0
		0			**0**			**0**
			0	0	0	0	0	0
			0	0	0	0	0	0
			0	0	0	0	0	0
			0	0	0	0	0	0
			0	0	0	0	0	0
		0			**510**			**510**
			60	1	60	60	1	60
			250	1	250	250	1	250
			100	2	200	100	2	200
		0			**2,725**			**2,725**
			300	1	300	300	1	300
			100	1	100	100	1	100
			200	1	200	200	1	200
			200	1	200	200	1	200
			375	1	375	375	1	375
			125	1	125	125	1	125
			150	1	150	150	1	150
			150	1	150	150	1	150
			350	1	350	350	1	350
			150	2	300	150	2	300
			100	1	100	100	1	100
			50	1	50	50	1	50
			325	1	325	325	1	325
		0			**1,825**			**1,825**
			150	1	150	150	1	150
			250	1	250	250	1	250
			375	1	375	375	1	375
			400	1	400	400	1	400
			217	1	217	217	1	217
			233	1	233	233	1	233
			200	1	200	200	1	200
		0			**0**			**0**
		0			**32,855**			**32,855**
					49,283			
					1.5			**0.00**

MSBA Guidelines (refer to MSBA Educational Program & Space Standard Guidelines)			
ROOM NFA[1]	# OF RMS	area totals	Comments
		15,740	
950	12	11,400	850 SF min + 950 SF max
		4,530	
950	3	2,850	assumed 8% of pop. in self-contained SPED
60	3	180	
500	2	1,000	1/2 size Genl. Clrm.
500	1	500	1/2 size Genl. Clrm.
		3,050	
1,200	1	1,200	assumed use - 50% population 2 times / week
150	1	150	
1,500	1	1,500	assumed use - 50% population 2 times / week See HS program
200	1	200	
		3,200	
1,200	1	1,200	Assumed use - 25% Population - 5 times/week
2,000	1	2,000	Assumed use - 25% Population - 5 times/week
		8,400	
6,000	1	6,000	See HS program
150	1	150	
250	1	250	
1,000	2	2,000	
		2,680	
2,680	1	2,680	See HS program
		6,392	
2,625	1	2,625	2 seatings + 158F per seat See HS program
1,600	1	1,600	
317	1	317	
1,650	1	1,650	1600 SF for first 300 + 1 SF/student Add'l
200	1	200	20 SF/Occupant
		510	
60	1	60	
250	1	250	
100	2	200	
		2,725	
300	1	300	
100	1	100	
200	1	200	
200	1	200	
375	1	375	
125	1	125	
150	1	150	
150	0	-	
150	1	150	
350	1	350	
150	2	300	
100	1	100	
50	1	50	
325	1	325	
		1,825	
150	1	150	
250	1	250	
375	1	375	
400	1	400	
217	1	217	
233	1	233	
200	1	200	
		0	
		49,052	
		350	
		66,500	
		1.36	

Abington High School	Existing Conditions		
ROOM TYPE	ROOM NFA[1]	# OF RMS	area totals
CORE ACADEMIC SPACES			**24,321**
(List classrooms of different sizes separately)			
Classroom - General	0	0	0
Teacher Planning			0
Small Group Seminar (20-30 seats)			0
Science Classroom / Lab	0	0	0
Prep Room			0
Central Chemical Storage Rm			0
Classroom - English	618	1	618
Classroom - English	708	3	2,124
Classroom - English	716	1	716

PROPOSED								
Existing to Remain/Renovated			New			Total		
ROOM NFA[1]	# OF RMS	area totals	ROOM NFA[1]	# OF RMS	area totals	ROOM NFA[1]	# OF RMS	area totals
		0			**23,460**			**23,460**

MSBA Guidelines (refer to MSBA Educational Program & Space Standard Guidelines)			
ROOM NFA[1]	# OF RMS	area totals	Comments
		23,410	
850	17	14,450	825 SF min - 950 SF max
100	17	1,700	
500	1	500	
1,440	4	5,760	3 x65% ut=20 Seats=1 per /day/student
200	4	800	
200	1	200	

Classroom - English	717	1	717												
Classroom - History	705	1	705												
Classroom - History	708	2	1,416												
Classroom - History	713	1	713												
Classroom - Math	708	4	2,832												
Classroom - Math	710	1	710												
Classroom - Math	711	1	711												
Classroom - Math	713	1	713												
Classroom - Math	717	1	717												
Math Office	276	1	276												
Classroom - Foreign Language	705	1	705												
Classroom - Foreign Language	707	1	707												
Classroom - Foreign Language	708	1	708												
Classroom - Foreign Language	711	1	711												
Classroom - Foreign Language	731	1	731												
Language / Language History Office	349	1	349												
Science Classroom / Lab	706	1	706												
Science Classroom / Lab	1,063	1	1,063												
Science Classroom / Lab	1,150	1	1,150												
Science Classroom / Lab	1,200	1	1,200												
Science Classroom / Lab	1,295	1	1,295												
Science Classroom / Lab	1,296	1	1,296												
Science Classroom / Lab Prep/Storage	120	1	120												
Science Classroom / Lab Prep/Storage	261	1	261												
Science Classroom / Lab Prep/Storage	351	1	351												
Team Rooms				450	4	1,800	450	4	1,800						
Math				825	4	3,300	825	4	3,300						
English				825	4	3,300	825	4	3,300						
SS/Lang				825	4	3,300	825	4	3,300						
Hist/Geog				825	4	3,300	825	4	3,300						
Science				1,440	4	5,760	1,440	4	5,760						
Science Prep				200	4	800	200	4	800						
Chem Stor				200	1	200	200	1	200						
Teach Plan				850	2	1,700	850	2	1,700						
SPECIAL EDUCATION			**4,524**	**0**		**4,030**			**4,030**			**4,030**			
(List classrooms of different sizes separately)															
Self-Contained SPED			0	950	3	2,850	950	3	2,850	950	3	2,850	Assumed 8% of pop. in self-contained SPED		
Self-Contained SPED Toilet			0	60	3	180	60	3	180	60	3	180			
Resource Room			0	500	1	500	500	1	500	500	1	500	1/2 size Gen. Clrm.		
Small Group Room			0	500	1	500	500	1	500	500	1	500	1/2 size Gen. Clrm.		
Academic Support	705	1	705												
Co-Op / Life Skills	809	2	1,618												
School Psychologist	322	1	322												
Testing	140	1	140												
Collaborative CR	630	1	630												
Alternative Living - Classroom	705	1	705												
SPED	404	1	404												
ART & MUSIC			**13,042**	**0**		**10,125**			**10,125**			**5,125**			
Art Classroom - 25 seats	705	1	705	1,200	1	1,200	1,200	1	1,200	1,200	1	1,200	Assumed use - 25% Population - 5 times/week		
Art Workroom w/ Storage & kiln			0	150	1	150	150	1	150	150	1	150			
Band - 50 - 100 seats	2,880	1	2,880	1,500	1	1,500	1,500	1	1,500	1,500	1	1,500	Assumed use - 25% Population - 5 times/week		
Chorus - 50 - 100 seats			0	1,500	1	1,500	1,500	1	1,500	1,500	1	1,500			
Ensemble	120	1	120	200	1	200	200	1	200	200	1	200			
Music Practice			0	75	1	75	75	1	75	75	1	75			
Music Storage			0	500	1	500	500	1	500	500	1	500			
Music Room	3,685	1	3,685	3,000	1	3,000	3,000	1	3,000						
Music Dir.	150	1	150												
Art 3-D Lab - Art Studio?	1,068	1	1,068												
Art 2-D Lab - Art Studio?	2,289	1	2,289	2,000	1	2,000	2,000	1	2,000						
Art Comp Lab - Digital Art Lab?	1,077	1	1,077												
Storage	295	1	295												
Drama Storage	504	1	504												
Art Director's Office	269	1	269												
VOCATIONS & TECHNOLOGY			**2,187**	**0**		**6,050**			**6,050**			**3,200**			
Tech Clrm. - (E.G. Drafting, Business)	685	1	685	750	1	750	750	1	750	1,200	1	1,200	Assumed use - 50% Population - 5 times/week		
Tech Shop - (E.G. Consumer, Wood)			0							2,000	1	2,000	Assumed use - 50% Population - 5 times/week		
School Bank	294	1	294	200	1	200	200	1	200						
School Store	140	1	140	1,100	1	1,100	1,100	1	1,100						
Academic Lab - Computer Lab	1,068	1	1,068	1,000	4	4,000	1,000	4	4,000						
Project Based Lab															
HEALTH & PHYSICAL EDUCATION			**17,178**	**0**		**26,025**			**26,025**			**18,720**			
Gymnasium	9,300	1	9,300	8,500	2	17,000	8,500	2	17,000	12,000	1	12,000			
PE Alternatives				3,000	1	3,000	3,000	1	3,000	3,000	1	3,000			
Gym Storeroom	457	1	457	300	1	300	300	1	300	300	1	300			
Locker Rooms - Boys / Girls w/ Toilets	5,390	1	5,390	2,000	2	4,000	2,000	2	4,000	2,520	1	2,520	5-6 sf/student total		
Phys. Ed. Storage	174	1	174	500	1	500	500	1	500	500	1	500			
Athletic Director's Office	167	1	167	150	1	150	150	1	150	150	1	150			
Health Instructor's Office w/ Shower & Toilet				250	1	250	250	1	250	250	1	250			
Health Office	143	1	143												
Health Class	698	1	698	825	1	825	825	1	825						
Weight Room	849	1	849												
MEDIA CENTER			**2,331**	**0**		**3,650**			**3,650**			**3,650**			
Media Center / Reading Room - Library	2,331	1	2,331	3,650	1	3,650	3,650	1	3,650	3,650	1	3,650			
Computer Lab															
AUDITORIUM / DRAMA			**504**	**0**		**10,763**			**10,763**			**5,763**			
Auditorium				7,500	1	7,500	7,500	1	7,500	3,000	1	3,000	2/3 Enrolment @ 10 SF/Seat - 750 seats MAX (750)		
Stage				1,600	1	1,600	1,600	1	1,600	1,600	1	1,600			
Auditorium Storage				363	1	363	363	1	363	363	1	363			
Make-up / Dressing Rooms				300	2	600	300	2	600	300	2	600			
Controls / Lighting / Projection				200	1	200	200	1	200	200	1	200			
Drama Set Design	504	1	504	500	1	500	500	1	500						
DINING & FOOD SERVICE			**10,351**	**0**		**10,675**			**10,675**			**5,300**			
Cafeteria / Student Lounge / Break-out	5,277	1	5,277	4,725	1	4,725	4,725	1	4,725	2,250	1	2,250	3 seatings - 15SF per seat		
Chair / Table Storage				600	1	600	600	1	600	300	1	300			
Scramble Serving Area				600	1	600	600	1	600	600	1	600			
Kitchen	3,156	1	3,156	2,800	1	2,800	2,800	1	2,800	1,750	1	1,750	1600 SF for first 300 + 1 SF/student Add'l		
Staff Lunch Room - Teachers Room	704	1	704	700	1	700	700	1	700	400	1	400	20 SF/Occupant		
Greenwave Café	1,214	1	1,214	1,250	1	1,250	1,250	1	1,250						
MEDICAL			**359**	**0**		**610**			**610**			**610**			
Medical Suite Toilet				60	1	60	60	1	60	60	1	60			
Nurses' Office / Waiting Room	359	1	359	250	1	250	250	1	250	250	1	250			
Interview Room				100	1	100	100	1	100	100	1	100			
Examination Room / Resting				100	2	200	100	2	200	100	2	200			
ADMINISTRATION & GUIDANCE			**3,830**	**0**		**3,370**			**3,370**			**3,370**			
General Office / Waiting Room / Toilet				300	1	300	300	1	300	300	1	300			
Teachers' Mail and Time Room				100	1	100	100	1	100	100	1	100			
Duplicating Room				200	1	200	200	1	200	200	1	200			
Records Room				200	1	200	200	1	200	200	1	200			
Principal's Office w/ Conference Area				375	1	375	375	1	375	375	1	375			
Principal's Secretary / Waiting				125	1	125	125	1	125	125	1	125			
Assistant Principal's Office - AP1				150	1	150	150	1	150	150	1	150			
Assistant Principal's Office - AP2										150	0	-			
Supervisory / Spare Office				120	1	120	120	1	120	120	1	120			
Conference Room				450	1	450	450	1	450	450	1	450			
Guidance Office				150	3	450	150	3	450	150	3	450			
Guidance Waiting Room				100	1	100	100	1	100	100	1	100			
Guidance Storeroom				100	1	100	100	1	100	100	1	100			
Career Center				300	1	300	300	1	300	300	1	300			
Records Room				100	1	100	100	1	100	100	1	100			
Teachers' Work Room				300	1	300	300	1	300	300	1	300			
Administration	1,415	1	1,415												
Guidance	720	1	720												
Offices & Storage	677	1	677												
English/Science Office	333	1	333												
In-House Detention	256	1	256												
School Security Office	159	1	159												
Book Storage	270	1	270												
CUSTODIAL & MAINTENANCE			**518**	**0**		**2,075**			**2,075**			**2,075**			
Custodian's Office				150	1	150	150	1	150	150	1	150			
Custodian's Workshop				250	1	250	250	1	250	250	1	250			
Custodian's Storage				375	1	375	375	1	375	375	1	375			
Recycling Room / Trash				400	1	400	400	1	400	400	1	400			
Receiving and General Supply				300	1	300	300	1	300	300	1	300			

Storeroom						400	1	400	400	1	400	400	1	400	
Network / Telecom Room						200	1	200	200	1	200	200	1	200	
Boiler Room															
Servers	190	1	190												
Head End Room	328	1	328												
OTHER			**0**			**0**			**0**			**0**			
Other (specify)															
Total Building Net Floor Area (NFA)			**79,145**			**0**		**100,833**			**100,833**			**75,253**	
Proposed Student Capacity / Enrollment														**450**	226
Total Building Gross Floor Area (GFA)[2]			**111,831**					**151,250**						**101,700**	
Grossing factor (GFA/NFA)			**1.41**					**1.5**			**0.00**			**1.35**	

CORE ACADEMIC SPACES - Pre-K			**3,700**		**0**			**4,400**			**4,400**			**4,800**	
(List classrooms of different sizes separately)															
Pre-Kindergarten w/ toilet	4	925	3,700		4	1,100	4,400	4	1,100	4,400	1,200	4	4,800	1,100 SF min - 1,300 SF max
ADMINISTRATION & GUIDANCE - Pre-K			**1,057**		**0**			**1,160**			**1,160**			**1,160**	
General Office / Waiting Room / Toilet	1	278	278		1	300	300	1	300	300	300	1	300		
Teachers' Mail and Time Room	1	225	225		1	100	100	1	100	100	100	1	100		
Duplicating Room	1	176	176		1	150	150	1	150	150	150	1	150		
Records Room	1	90	90		1	110	110	1	110	110	110	1	110		
Principal's Office w/ Conference Area	1	190	190		1	375	375	1	375	375	375	1	375		
Principal's Secretary / Waiting	1	98	98		1	125	125	1	125	125	125	1	125		

Total Building Net Floor Area (NFA)			**118,797**		**0**		**139,248**			**139,248**			**130,265**	
Proposed Student Capacity / Enrollment													**770**	210
Total Building Gross Floor Area (GFA)[2]			**163,560**				**208,872**						**196,700**	* No guideline total exists for co-located
Grossing factor (GFA/NFA)			**1.45**				**1.5**			**0.00**			**1.51**	Average GF for 775 middle/high

[1] **Individual Room Net Floor Area (NFA)** Includes the net square footage measured from the inside face of the perimeter walls and includes all specific spaces assigned to a particular program area including such spaces as non-communal toilets and storage rooms.

[2] **Total Building Gross Floor Area (GFA)** Includes the entire building gross square footage measured from the outside face of exterior walls

Architect Certification

I hereby certify that all of the information provided in this "Proposed Space Summary" is true, complete and accurate and, except as agreed to in writing by the Massachusetts School Building Authority, in accordance with the guidelines, rules, regulations and policies of the Massachusetts School Building Authority to the best of my knowledge and belief. A true statement, made under the penalties of perjury.

Name of Architect Firm: _____

Name of Principal Architect: _____

Signature of Principal Architect: _____

Date: _____

Proposed Space Summary - Hig[illegible]ools
7.2.13

DRAFT

9-12 High School for 450 students

Abington High School

ROOM TYPE	Existing Conditions: ROOM NFA[1]	Existing Conditions: # OF RMS	Existing Conditions: area totals	PROPOSED – Existing to Remain/Renovated: ROOM NFA[1]	Existing to Remain/Renovated: # OF RMS	Existing to Remain/Renovated: area totals	New: ROOM NFA[1]	New: # OF RMS	New: area totals	Total: ROOM NFA[1]	Total: # OF RMS	Total: area totals	MSBA Guidelines (refer to MSBA Educational Program & Space Standard Guidelines): ROOM NFA[1]	MSBA: # OF RMS	MSBA: area totals	Comments
CORE ACADEMIC SPACES			24,321			0			23,460			23,460			23,410	
(List classrooms of different sizes separately)																
Classroom - General	0	0	0										850	17	14,450	825 SF min - 950 SF max
Teacher Planning			0										100	17	1,700	
Small Group Seminar (20-30 seats)			0										500	1	500	
Science Classroom / Lab	0	0	0										1,440	4	5,760	3 x 85% ut=20 Seats 1 per day/student
Prep Room			0										200	4	800	
Central Chemical Storage Rm			0										200	1	200	
Classroom - English	618	1	618													
Classroom - English	708	3	2,124													
Classroom - English	716	1	716													
Classroom - English	717	1	717													
Classroom - History	705	1	705													
Classroom - History	708	2	1,416													
Classroom - History	713	1	713													
Classroom - Math	708	4	2,832													
Classroom - Math	710	1	710													
Classroom - Math	711	1	711													
Classroom - Math	713	1	713													
Classroom - Math	717	1	717													
Math Office	276	1	276													
Classroom - Foreign Language	705	1	705													
Classroom - Foreign Language	707	1	707													
Classroom - Foreign Language	708	1	708													
Classroom - Foreign Language	711	1	711													
Classroom - Foreign Language	731	1	731													
Language / Language History Office	349	1	349													
Science Classroom / Lab	706	1	706													
Science Classroom / Lab	1,063	1	1,063													
Science Classroom / Lab	1,150	1	1,150													
Science Classroom / Lab	1,200	1	1,200													
Science Classroom / Lab	1,295	1	1,295													
Science Classroom / Lab	1,296	1	1,296													
Science Classroom / Lab Prep/Storage	120	1	120													
Science Classroom / Lab Prep/Storage	261	1	261													
Science Classroom / Lab Prep/Storage	351	1	351													
Team Rooms							450	4	1,800	450	4	1,800				
Math							825	4	3,300	825	4	3,300				
English							825	4	3,300	825	4	3,300				
SS/Lang							825	4	3,300	825	4	3,300				
Hist/Geog							825	4	3,300	825	4	3,300				
Science							1,440	4	5,760	1,440	4	5,760				
Science Prep							200	4	800	200	4	800				
Chem Stor							200	1	200	200	1	200				
Teach Plan							850	2	1,700	850	2	1,700				
SPECIAL EDUCATION			4,524			0			4,030			4,030			4,030	
(List classrooms of different sizes separately)																
Self-Contained SPED			0				950	3	2,850	950	3	2,850	950	3	2,850	assumed 8% of pop in self-contained SPED
Self-Contained SPED Toilet			0				60	3	180	60	3	180	60	3	180	
Resource Room			0				500	1	500	500	1	500	500	1	500	1/2 size Genl Clrm
Small Group Room			0				500	1	500	500	1	500	500	1	500	1/2 size Genl Clrm
Academic Support	705	1	705													
Co-Op / Life Skills	809	2	1,618													
School Psychologist	322	1	322													
Testing	140	1	140													
Collaborative CR	630	1	630													
Alternative Living - Classroom	705	1	705													
SPED	404	1	404													
ART & MUSIC			13,042			0			11,125			11,125			5,125	
Art Classroom - 25 seats	705	1	705				1,200	1	1,200	1,200	1	1,200	1,200	1	1,200	Assumed use - 25% Population - 5 times/week
Art Workroom w/ Storage & kiln			0				150	1	150	150	1	150	150	1	150	
Band - 50 - 100 seats	2,880	1	2,880				1,500	1	1,500	1,500	1	1,500	1,500	1	1,500	Assumed use - 25% Population - 5 times/week
Chorus - 50 - 100 seats			0				1,500	1	1,500	1,500	1	1,500	1,500	1	1,500	
Ensemble	120	1	120				200	1	200	200	1	200	200	1	200	
Music Practice			0				75	1	75	75	1	75	75	1	75	
Music Storage			0				500	1	500	500	1	500	500	1	500	
Music Room	3,685	1	3,685				3,000	1	3,000	3,000	1	3,000				
Music Dir.	150	1	150													
Art 3-D Lab - Art Studio?	1,068	1	1,068													
Art 2-D Lab - Art Studio?	2,289	1	2,289				2,000	1	2,000	2,000	1	2,000				
Art Comp Lab - Digital Art Lab?	1,077	1	1,077				1,000	1	1,000	1,000	1	1,000				
Storage	295	1	295													
Drama Storage	504	1	504													
Art Director's Office	269	1	269													
VOCATIONS & TECHNOLOGY			2,187			0			6,050			6,050			3,200	
Tech Clrm. - (E.G. Drafting, Business)	685	1	685				750	1	750	750	1	750	1,200	1	1,200	Assumed use - 50% Population - 5 times/week
Tech Shop - (E.G. Consumer, Wood)			0										2,000	1	2,000	Assumed use - 50% Population - 5 times/week
School Bank	294	1	294													
School Store	140	1	140				200	1	200	200	1	200				
Academic Lab - Computer Lab	1,068	1	1,068				1,100	1	1,100	1,100	1	1,100				
Project Based Lab							1,000	4	4,000	1,000	4	4,000				
HEALTH & PHYSICAL EDUCATION			17,178			0			24,025			24,025			18,720	
Gymnasium	9,300	1	9,300				7,500	2	15,000	7,500	2	15,000	12,000	1	12,000	
PE Alternatives							3,000	1	3,000	3,000	1	3,000	3,000	1	3,000	
Gym Storeroom	457	1	457				300	1	300	300	1	300	300	1	300	
Locker Rooms - Boys / Girls w/ Toilets	5,390	1	5,390				2,000	2	4,000	2,000	2	4,000	2,520	1	2,520	5.6 sf/student total
Phys. Ed. Storage	174	1	174				500	1	500	500	1	500	500	1	500	
Athletic Director's Office	167	1	167				150	1	150	150	1	150	150	1	150	
Health Instructor's Office w/ Shower & Toilet							250	1	250	250	1	250	250	1	250	
Health Office	143	1	143													
Health Class	698	1	698				825	1	825	825	1	825				
Weight Room	849	1	849													
MEDIA CENTER			2,331			0			3,650			3,650			3,650	
Media Center / Reading Room - Library	2,331	1	2,331				3,650	1	3,650	3,650	1	3,650	3,650	1	3,650	
Computer Lab																
AUDITORIUM / DRAMA			504			0			10,763			10,763			5,763	
Auditorium							7,500	1	7,500	7,500	1	7,500	3,000	1	3,000	2/3 Enrollment @ 10 SF/Seat - 750 seats MAX (750)
Stage							1,600	1	1,600	1,600	1	1,600	1,600	1	1,600	
Auditorium Storage							363	1	363	363	1	363	363	1	363	
Make-up / Dressing Rooms							300	2	600	300	2	600	300	2	600	
Controls / Lighting / Projection							200	1	200	200	1	200	200	1	200	
Drama Set Design	504	1	504				500	1	500	500	1	500				
DINING & FOOD SERVICE			10,351			0			7,600			7,600			5,300	
Cafeteria / Student Lounge / Break-out	5,277	1	5,277				2,250	1	2,250	2,250	1	2,250	2,250	1	2,250	3 seatings - 15SF per seat
Chair / Table Storage							300	1	300	300	1	300	300	1	300	
Scramble Serving Area							600	1	600	600	1	600	600	1	600	
Kitchen	3,156	1	3,156				2,800	1	2,800	2,800	1	2,800	1,750	1	1,750	1600 SF for first 300 + 1 SF/student Add'l
Staff Lunch Room - Teachers Room	704	1	704				400	1	400	400	1	400	400	1	400	20 SF/Occupant
Greenwave Café	1,214	1	1,214				1,250	1	1,250	1,250	1	1,250				
MEDICAL			359			0			610			610			610	
Medical Suite Toilet							60	1	60	60	1	60	60	1	60	
Nurses' Office / Waiting Room	359	1	359				250	1	250	250	1	250	250	1	250	
Interview Room							100	1	100	100	1	100	100	1	100	
Examination Room / Resting							100	2	200	100	2	200	100	2	200	
ADMINISTRATION & GUIDANCE			3,830			0			3,370			3,370			3,370	
General Office / Waiting Room / Toilet							300	1	300	300	1	300	300	1	300	
Teachers' Mail and Time Room							100	1	100	100	1	100	100	1	100	
Duplicating Room							200	1	200	200	1	200	200	1	200	
Records Room							200	1	200	200	1	200	200	1	200	
Principal's Office w/ Conference Area							375	1	375	375	1	375	375	1	375	
Principal's Secretary / Waiting							125	1	125	125	1	125	125	1	125	
Assistant Principal's Office - AP1							150	1	150	150	1	150	150	1	150	
Assistant Principal's Office - AP2													150	0	-	
Supervisory / Spare Office							120	1	120	120	1	120	120	1	120	
Conference Room							450	1	450	450	1	450	450	1	450	
Guidance Office							150	3	450	150	3	450	150	3	450	
Guidance Waiting Room							100	1	100	100	1	100	100	1	100	
Guidance Storeroom							100	1	100	100	1	100	100	1	100	
Career Center							300	1	300	300	1	300	300	1	300	
Records Room							100	1	100	100	1	100	100	1	100	
Teachers' Work Room							300	1	300	300	1	300	300	1	300	
Administration	1,415	1	1,415													
Guidance	720	1	720													
District Offices	677	1	677													
English/Science Office	333	1	333													
In-House Detention	256	1	256													
School Security Office	159	1	159													
Book Storage	270	1	270													
CUSTODIAL & MAINTENANCE			518			0			2,075			2,075			2,075	
Custodian's Office							150	1	150	150	1	150	150	1	150	
Custodian's Workshop							250	1	250	250	1	250	250	1	250	
Custodian's Storage							375	1	375	375	1	375	375	1	375	
Recycling Room / Trash							400	1	400	400	1	400	400	1	400	
Receiving and General Supply							300	1	300	300	1	300	300	1	300	
Storeroom							400	1	400	400	1	400	400	1	400	
Network / Telecom Room							200	1	200	200	1	200	200	1	200	
Boiler Room																
Servers	190	1	190													
Head End Room	328	1	328													
OTHER			0			0			0			0			0	
Other (specify)																
Total Building Net Floor Area (NFA)			79,145			0			96,758			96,758			75,253	
Proposed Student Capacity / Enrollment															450	226
Total Building Gross Floor Area (GFA)[2]			111,831						145,137						101,700	
Grossing factor (GFA/NFA)			1.41						1.5			0.00			1.35	

[1] **Individual Room Net Floor Area (NFA)** Includes the net square footage measured from the inside face of the perimeter walls and includes all specific spaces assigned to a particular program area including such spaces as non-communal toilets and storage rooms

[2] **Total Building Gross Floor Area (GFA)** Includes the entire building gross square footage measured from the outside face of exterior walls

Architect Certification

I hereby certify that all of the information provided in this "Proposed Space Summary" is true, complete and accurate and, except as agreed to in writing by the Massachusetts School Building Authority, in accordance with the guidelines, rules, regulations and policies of the Massachusetts School Building Authority to the best of my knowledge and belief. A true statement, made under the penalties of perjury.

Name of Architect Firm: ______________________

Name of Principal Architect: ______________________

Signature of Principal Architect: ______________________

Date: ______________________

1	Major Milestones Timeline
2	Facilities Evaluation
3	Site Evaluations Summary
4	Educational Visioning Summary Document
5	Educational Programming Document
6	Introduction Document
7	Space Summary Documents
8	Options Considered Document
9	Evaluation Matrix
10	Draft of Cost Analysis Options
11	Cost of New School vs. Renovation Document
12	Review of Major Milestones

summary of options considered

Many options were considered as part of the overall analysis of the best possible option for solving educational and physical deficiencies and the overcrowding within the school facilities in the Town of Abington. Some primary objectives emerged as part of the analysis, and these objectives provided clear criteria for consideration and evaluation of the options. The objectives include but are not limited to:

1. Provide sufficient 21st Century educational space for middle school students within the Town of Abington.

- Provide new/renovated facilities to accommodate current/future middle school students.
- Create a middle school which allows the 5/6 population to co-exist with the 7/8 populations in a "school within a school" model. The limited 7/8 population has traditionally resulted in compromised programming and teaming opportunities in Abington. Adding additional grades to this school would allow the two schools (5/6 and 7/8) to share many resources and expand educational opportunities, but would maintain any necessary separations. The educational visioning and planning process revealed that combining students in Grades 5 through 8 provides educational benefits, organizational benefits, and creates a number of desired efficiencies.

2. Provide sufficient 21st Century educational space for high school students within the Town of Abington.

- Provide new/renovated facilities to accommodate current/future high school students.

3. Locate the middle school and the high school on the same site in a co-located middle/high school that separates middle and high school students but also allows students to share facilities on a single campus to increase efficiency and available resources.

- The feasibility study revealed that the small size of the Town of Abington and its resulting (small) student enrollment presents several challenges when planning an educational facility that includes the appropriate resources. For example, if the middle school and high school continue to operate as independent and separated facilities, they have respective populations of 665 and 450. An auditorium facility would be highly utilized at the high school, but the 450 student population would only justify an auditorium with a seating capacity of 300 (as per MSBA regulations). This would limit the school use of such a facility and, more importantly, would render it too small for community use. However, combining the two school facilities on the same site in a co-located school (Two separate schools with connecting shared facilities) will justify an auditorium which seats 750. Co-locating the two populations also justifies better resources and more space for the media center, student dining, and other shared student and community facilities, such as gymnasium space.
- Co-locating the middle and high schools expands educational opportunities which can be offered to middle school students, such as advanced placement coursework.
- Co-locating the middle and high schools increases project-based learning opportunities in specialty lab areas through the sharing of facilities.

- Co-locating the middle and high schools creates administrative, staffing, and maintenance efficiencies.

4. Execute a single project which maximizes impact across all grade levels.

- Multiple projects would require that the Town approve each project independently. The MSBA procedures for reimbursement and support recognize one project per submittal. If multiple projects are being considered, each one would need to be submitted independently, and there is no guarantee that future projects will be considered/approved.
- The options analysis demonstrates that scenarios that include multiple school projects on multiple sites results in a longer timeline, inflationary increases, and more uncertainty.

5. Resolve overcrowding across all grade levels with a single project.

- The capacity and enrollment analysis indicates that removing 6th grade from the elementary schools and placing it within newly created middle school space relieves current overcrowding in Grades 1 through 5. Furthermore, removing 5th grade from the elementary school environment creates sufficient capacity in the elementary schools to allow for expansion of full-day kindergarten opportunities and the closing of the outdated, inefficient Center School. Any proposed option which could resolve issues at the middle school, high school elementary schools, and kindergarten simultaneously, in a single project, would have significant educational and financial benefits to the Town.

6. Provide newly created Pre-Kindergarten (PK) space at the high school.

- The educational visioning and programming process revealed that creating PK classrooms at the high school could allow for the support and expansion of a highly enrolled Child Development Program at the high school, expanding opportunities for students there. It would have the added benefit of creating sufficient PK space to allow for the closing of Center School (if kindergarten is moved to the elementary schools as a result of the 5th grade being moved to newly created middle school space).

7. Preserve existing playfields and expand athletic, recreation, and community outdoor playfield space.

- As with all small communities, playfield space for community, recreation, and school groups and teams is at a premium. Options which sustain or expand existing playfield opportunities are highly desirable.

8. Minimize impact to the Town, community, and school department throughout construction.

- Although it is understood that there will be some impact as part of the development of any new project, options which minimize such impact are desirable.
- Minimize impact to the educational environment by limiting construction in direct proximity to school occupied spaces. Shorter construction durations which minimize impact to the school and community are obviously more desirable.

9. Maximize MSBA support and available grant funding.

- Although it is understood that some portions of the project may not be eligible for MSBA

grant reimbursement funding, options which maximize the available grant reimbursement funding are highly desirable.

10. Maintain central location of school facilities within the Town.

- The sharing of resources among the schools and community is one of the primary efficiencies associated with the proximity of existing schools, particularly the middle school and the high school facilities. Options which continue to locate/maintain school facilities within a central location in the Town and in close proximity to other Town facilities and playfields will benefit the school department and the entire community.

11. Any proposed option should be educationally appropriate, fiscally responsible, and provide a solid long-term solution to school and facility needs in the Town.

The following is a summary of initial options considered as part of a review of facility and school needs:

Option 1

- Construct a new 5-12 co-located middle/high school with PreK facilities on the existing high school site. The existing high school would be demolished upon completion of the new facility.
- Utilize the existing Beaver Brook Elementary School (Grades 1-4) as a K-2 (full-day K).
- Utilize the existing Woodsdale Elementary School (Grades 5-6) as a 3-4.

This option completes a single building project which resolves overcrowding across all grade levels (PK-Grade 12). It would allow the inefficient and outdated Center and Frolio schools to be closed for school uses, as it creates sufficient capacity to allow all programs, including additional full-day K opportunities, to exist.

One MAJOR advantage of combining grades 5-12 into a single building project is that it creates a large enough student population to trigger MSBA support and reimbursement for resources such as a 750 seat auditorium. Any scenario that does not combine the middle school and high school populations would result in smaller facilities with less MSBA supported resources.

There are many challenges associated with planning multiple school projects over the next 10 years in Abington. An option which resolves all current overcrowding and provides appropriate educational space for all students in grades PK-12 creates an attractive alternative for ALL parents and community members. Unknowns associated with future projects are eliminated, and the Town can be certain that a single project will satisfy the Town and school needs for many years to come.

Option 1B

- Renovate and expand the existing Abington High School for use as a 5-12 co-located middle/high school with PreK facilities on the existing high school site. This option would

require phased construction on the existing high school site while the school continues to be occupied. It would require more time to complete than Option 1, but would keep portions of the existing high school in place through comprehensive renovation and expansion.

- Utilize the existing Beaver Brook Elementary School (Grades 1-4) for Grades K-2 (full-day K).
- Utilize the existing Woodsdale Elementary School (Grades 5-6) for Grades 3-4.

This option completes a single building project which resolves overcrowding across all grade levels (PK-Grade 12). It would allow the inefficient and outdated Center and Frolio schools to be closed for school uses, as it creates sufficient capacity to allow all programs, including additional full-day K opportunities, to exist.

One MAJOR advantage of combining grades 5-12 into a single building project is that it creates a large enough student population to trigger MSBA support and reimbursement for resources such as a 750 seat auditorium. Any scenario that does not combine the middle school and high school populations would result in smaller facilities with less MSBA supported resources.

There are many challenges associated with planning multiple school projects over the next 10 years in Abington. An option which resolves all current overcrowding and provides appropriate educational space for all students in grades PK-12 creates an attractive alternative for ALL parents and community members. Unknowns associated with future projects are eliminated, and the Town can be certain that a single project will satisfy the Town and school needs for many years to come.

Option 2

- Construct a new 6-12 co-located middle/high school with PreK facilities on the existing high school site.
- Utilize Center School (Currently Grade PK-K) for continued use as Kindergarten with no additional full-day K opportunities
- Utilize the existing Beaver Brook Elementary School (Currently Grades 1-4) for Grades 1-3.
- Utilize the existing Woodsdale Elementary School (Currently Grades 5-6) for Grades 4-5.

One MAJOR advantage of combining grades 6-12 into a single building project is that it creates a large enough student population to trigger MSBA support and reimbursement for resources such as a 750 seat auditorium. Any scenario that does not combine the middle school and high school populations would result in smaller facilities with less MSBA supported resources.

This Option is similar to Option 1; however it does not create sufficient capacity to allow for the closing of Center School or additional full-day K opportunities. This option would require the Town to revisit facility needs for Kindergarten students at some point in the future and would require the Town to continue to incur the operational and maintenance costs associated with continuing to operate the Center School. In this option, the Frolio School would be closed for school uses.

Option 2B

- Renovate and expand the existing Abington High School for use as a 6-12 co-located middle/high school with PreK facilities.
- Utilize Center School (Currently Grade PK-K) for continued use as Kindergarten with no additional full-day K opportunities.
- Utilize the existing Beaver Brook Elementary School (Currently Grades 1-4) for Grades 1-3.
- Utilize the existing Woodsdale Elementary School (Currently Grades 5-6) for Grades 4-5.

One MAJOR advantage of combining grades 6-12 into a single building project is that it creates a large enough student population to trigger MSBA support and reimbursement for resources such as a 750 seat auditorium. Any scenario that does not combine the middle school and high school populations would result in smaller facilities with less MSBA supported resources.

This Option is similar to Option 1B; however it does not create sufficient capacity to allow for the closing of Center School or additional full-day K opportunities. This option would require the Town to revisit facility needs for Kindergarten students at some point in the future and would require the Town to continue to incur the operational and maintenance costs associated with continuing to operate the Center School. In this option, the Frolio School would be closed for school uses.

All of the following options (Options 3 through 7B) include two or more separate building projects. MSBA will only consider one building project at a time, so under these scenarios, the Town would have to re-apply to the MSBA for building projects beyond the first project, and such projects would also have to be approved/funded by the Town as separate projects, with each separate project needing its own Town Meeting and ballot election. There would obviously be some delay before the MSBA could consider subsequent projects, and there is no guarantee when/if the subsequent projects would be approved. Although these options would allow the Town to make a smaller initial investment, each of them proves significantly more expensive in the long run (for all Options 3 through 7B) and would take many more years to complete.

Option 3

- Project 1: Construct a new 6-12 co-located middle/high school on the existing high school site.
- Project 2: Renovate Frolio Middle School for Grades 4-5 elementary.
- Utilize the existing Beaver Brook Elementary School (Currently Grades 1-4) for grades PK-1.
- Utilize the existing Woodsdale Elementary School (Currently Grades 5-6) for Grades 2-3.
- Close the Center School (Currently Grades PK-K), as PK and K would be accommodated at the re-organized Beaver Brook Elementary School.

One MAJOR advantage of combining grades 6-12 into a single building project is that it creates a large enough student population to trigger MSBA support and reimbursement for resources

such as a 750 seat auditorium. Any scenario that does not combine the middle school and high school populations would result in smaller facilities with less MSBA supported resources.

This Option is similar to Option 2; however it utilizes a renovation project at the Frolio to resolve current PK-5 overcrowding. The renovation of the Frolio is an expensive project and may not provide an ideal elementary school environment, but this option is included as a means for keeping the Frolio operational as a school. The Town would have to re-apply to the MSBA for the Frolio building project subsequent to the completion of the 6-12 school, and such project would also have to be approved/funded by the Town as a separate project, requiring separate Town Meeting and ballot election. There would obviously be some delay before the MSBA could consider the Frolio project, and there is no guarantee when/if the project would be approved. For purposes of estimating the projected costs, it is assumed that the Frolio project would not commence until at least four years after the 6-12 project.

Option 3B

- Project 1: Renovate and expand the existing Abington High School for use as a 6-12 co-located middle/high school.
- Project 2: Renovate Frolio Middle School for Grades 4-5 elementary.
- Utilize the existing Beaver Brook Elementary School (Currently Grades 1-4) for grades PK-1.
- Utilize the existing Woodsdale Elementary School (Currently Grades 5-6) for Grades 2-3.
- Close the Center School (Currently Grades PK-K), as PK and K would be accommodated at the re-organized Beaver Brook Elementary School.

One MAJOR advantage of combining grades 6-12 into a single building project is that it creates a large enough student population to trigger MSBA support and reimbursement for resources such as a 750 seat auditorium. Any scenario that does not combine the middle school and high school populations would result in smaller facilities with less MSBA supported resources.

This Option is similar to Option 2; however it utilizes a renovation project at the Frolio to resolve current PK-5 overcrowding. The renovation of the Frolio is an expensive project and may not provide an ideal elementary school environment, but this option is included as a means for keeping the Frolio operational as a school. The Town would have to re-apply to the MSBA for the Frolio building project subsequent to the completion of the 6-12 school, and such project would also have to be approved/funded by the Town as a separate project, requiring separate Town Meeting and ballot election. There would obviously be some delay before the MSBA could consider the Frolio project, and there is no guarantee when/if the project would be approved. For purposes of estimating the projected costs, it is assumed that the Frolio project would not commence until at least four years after the 6-12 project.

Option 4

- Project 1: Construct new Abington High School for Grades 9-12.
- Project 2: Renovate/modify existing Frolio Middle School for continued use as a 7-8

middle school.

- Project 3: Renovate/expand Beaver Brook Elementary School (Currently Grades 1-4) for use as PK-3.
- Project 4: Renovate/expand Woodsdale Elementary School (Currently Grades 5-6) for Grades 4-6.
- Close the Center School (Currently Grades PK-K), as PK and K would be accommodated at the re-organized Beaver Brook Elementary School.

This option has many inherent educational and financial disadvantages. However, it is included to demonstrate the high cost and inefficiencies associated with continuing the current grade configurations and separate sites utilized for grades 7-12 by proposing to create a new 9-12 high school at the high school site and a renovated 7/8 Frolio school. This option does not provide ANY significant overcrowding relief until the execution of the third project, as the first two projects primarily involve modernizing educational opportunities and facilities for grades 7-12. The renovation of the Frolio is an expensive project and may not provide an ideal middle school environment for grades 7/8, but this option is included as a means for keeping the Frolio operational as a school, and continuing the current grade configurations in 7/8 and 9-12. One of the many disadvantages of this option is that the 9-12 high school is very small (in comparison to most high schools) and does not justify MSBA support of many resources such as a full size auditorium and larger community use spaces. The Town would have to re-apply to the MSBA for each of the three projects that occur subsequent to the completion of the 9-12 school, and such projects would also have to be approved/funded by the Town as separate projects, requiring separate Town Meeting and ballot election votes. There would obviously be some delay before the MSBA could consider the subsequent projects, and there is no guarantee when/if the project would be approved. For purposes of estimating the projected costs, it is assumed that the projects would not commence until at least four to seven years after the 9-12 project.

Option 4B

- Project 1: Renovate/modify existing Abington High School for use as a 9-12 high school.
- Project 2: Renovate/modify existing Frolio Middle School for use as a 7-8 middle school.
- Project 3: Renovate/expand Beaver Brook Elementary School (Grades 1-4) for use as PK-3.
- Project 4: Renovate/expand Woodsdale Elementary School (Grades 5-6) for Grades 4-6.
- Close the Center School (Currently Grades PK-K), as PK and K would be accommodated at the re-organized Beaver Brook Elementary School.

This option has many inherent educational and financial disadvantages. However, it is included to demonstrate the high cost and inefficiencies associated with continuing the current grade configurations and separate sites utilized for grades 7-12 by proposing a renovated/expanded 9-12 high school at the high school site and a renovated 7/8 Frolio school. This option does not provide ANY significant overcrowding relief until the execution of the third project, as the first two projects primarily involve modernizing educational opportunities and facilities for grades 7-12. The renovation of the Frolio is an expensive project and may not provide an ideal middle school environment for grades 7/8, but this option is included as a means for keeping

the Frolio operational as a school, and continuing the current grade configurations in 7/8 and 9-12. One of the many disadvantages of this option is that both the high school and middle school are very small (in comparison to most high schools and middle schools) and do not justify MSBA support of many resources such as a full size auditorium and larger community use spaces. The Town would have to re-apply to the MSBA for each of the three projects that occur subsequent to the completion of the 9-12 school, and such projects would also have to be approved/funded by the Town as separate projects, requiring separate Town Meeting and ballot election votes. There would obviously be some delay before the MSBA could consider the subsequent projects, and there is no guarantee when/if the project would be approved. For purposes of estimating the projected costs, it is assumed that the projects would not commence until at least four to seven years after the 9-12 project.

Option 5

- Project 1: Construct new Abington High School for Grades 9-12.
- Project 2: Renovate/expand Beaver Brook Elementary School (Currently Grades 1-4) for use as PK-4.
- Project 3: Renovate/expand Woodsdale Elementary School (Currently Grades 5-6) for Grades 5-8.
- Close the Center School (Currently Grades PK-K) and the Frolio School, as the grade levels currently accommodated by these schools would be relocated to expanded facilities at Beaver Brook Elementary and Woodsdale Elementary.

This option has many inherent educational and financial disadvantages. However, it is included to demonstrate the high cost and inefficiencies associated with creating the majority of the required additional space at the Beaver Brook Elementary and Woodsdale Elementary schools. This option does not provide ANY significant overcrowding relief until after the execution of all three projects, as the first project involves creating a new the 9-12 high school, the second project involves relieving PK-4 overcrowding and expanding educational opportunities for these grade levels, and the third project involves modernizing and expanding 5-8 facilities and relieving overcrowding for these students. This option becomes extremely expensive because the expansion at each of the existing elementary schools would trigger a requirement for comprehensive renovations and code compliance within the existing buildings. These buildings are in relatively good condition, and if they are not expanded, only minimal capital projects would have to be executed in the foreseeable future.

One of the additional disadvantages of this option is that both the high school remains very small (in comparison to most high schools and middle schools) and does not justify MSBA support of many resources such as a full size auditorium and larger community use spaces. Additionally, the Town would have to re-apply to the MSBA for each of the two projects that occur subsequent to the completion of the 9-12 school, and such projects would also have to be approved/funded by the Town as separate projects, requiring separate Town Meeting and ballot election votes. There would obviously be some delay before the MSBA could consider the subsequent projects, and there is no guarantee when/if the project would be approved. For purposes of estimating the projected costs, it is assumed that the projects would not commence until at least four to seven years after the 9-12 project.

Option 5B

- Project 1: Renovate/modify existing Abington High School for use as a 9-12 high school.
- Project 2: Renovate/expand Beaver Brook Elementary School (Currently Grades 1-4) for use as PK-4.
- Project 3: Renovate/expand Woodsdale Elementary School (Currently Grades 5-6) for Grades 5-8.
- Close the Center School (Currently Grades PK-K) and the Frolio School, as the grade levels currently accommodated by these schools would be relocated to expanded facilities at Beaver Brook Elementary and Woodsdale Elementary.

This option has many inherent educational and financial disadvantages. However, it is included to demonstrate the high cost and inefficiencies associated with creating the majority of the required additional space at the Beaver Brook Elementary and Woodsdale Elementary schools. This option does not provide ANY significant overcrowding relief until after the execution of all three projects, as the first project involves creating a renovated/expanded 9-12 high school, the second project involves relieving PK-4 overcrowding and expanding educational opportunities for these grade levels, and the third project involves modernizing and expanding 5-8 facilities and relieving overcrowding for these students. This option becomes extremely expensive because the expansion at each of the existing elementary schools would trigger a requirement for comprehensive renovations and code compliance within the existing buildings. These buildings are in relatively good condition, and if they are not expanded, only minimal capital projects would have to be executed in the foreseeable future.

One of the additional disadvantages of this option is that both the high school remains very small (in comparison to most high schools and middle schools) and does not justify MSBA support of many resources such as a full size auditorium and larger community use spaces. Additionally, the Town would have to re-apply to the MSBA for each of the two projects that occur subsequent to the completion of the 9-12 school, and such projects would also have to be approved/funded by the Town as separate projects, requiring separate Town Meeting and ballot election votes. There would obviously be some delay before the MSBA could consider the subsequent projects, and there is no guarantee when/if the project would be approved. For purposes of estimating the projected costs, it is assumed that the projects would not commence until at least four to seven years after the 9-12 project.

Option 6: Two Stages – Two New School Buildings

- Project 1: Construct a new Abington Middle School for Grades 5-8. Then subsequent to the completion and occupancy of the new middle school:
- Project 2: Construct a new Abington High School for Grades 9-12 with Pre-K.
- Utilize the existing Beaver Brook Elementary School (Currently Grades 1-4) as a K-2 (full-day K).
- Utilize the existing Woodsdale Elementary School (Currently Grades 5-6) as a 3-4.
- Close the Center School (Currently Grades PK-K) and the Frolio School, as the grade levels currently accommodated by these schools would be relocated to expanded facilities at the other schools.

This option is similar to Option 1, except it separates the 5-12 co-located school project into two separate projects on the high school site; a new middle school project and a new high school project. One MAJOR disadvantage of this approach is the Town is only authorized (Through MSBA) for a single project, and would have to re-apply to the MSBA for the 9-12 high school project. Such project would have to be approved/funded by the Town as a separate project, requiring separate Town Meeting and ballot election votes. There would obviously be some delay before the MSBA could consider the subsequent high school project, and there is no guarantee when/if the project would be approved. For purposes of estimating the projected costs, it is assumed that the high school project would not commence until at least four years after the middle school project, resulting in significant inflationary costs. Another significant disadvantage of executing two separate projects is that each of the schools represents a single stand-alone building with a relatively small student population (compared to most middle and high schools), and does not justify MSBA support of many resources such as a full size auditorium and larger community use spaces. If the two schools are combined into a single co-located school (Like Options 1 through 3b) they form a larger facility with more MSBA support of such resources.

Option 6B: Two Stages – Two New/Renovated School Buildings

- Project 1: Construct a new Abington Middle School for Grades 5-8. Then subsequent to the completion and occupancy of the new middle school:
- Project 2: Renovate/Expand new Abington High School for Grades 9-12 with Pre-K.
- Utilize the existing Beaver Brook Elementary School (Currently Grades 1-4) as a K-2 (full-day K).
- Utilize the existing Woodsdale Elementary School (Currently Grades 5-6) as a 3-4.
- Close the Center School (Currently Grades PK-K) and the Frolio School, as the grade levels currently accommodated by these schools would be relocated to expanded facilities at the other schools.

This option is similar to Option 1B, except it separates the 5-12 co-located school project into two separate projects on the high school site; a new middle school project and a renovation/ addition high school project. One MAJOR disadvantage of this approach is the Town is only authorized (Through MSBA) for a single project, and would have to re-apply to the MSBA for the 9-12 high school project. Such project would have to be approved/funded by the Town as a separate project, requiring separate Town Meeting and ballot election votes. There would obviously be some delay before the MSBA could consider the subsequent high school project, and there is no guarantee when/if the project would be approved. For purposes of estimating the projected costs, it is assumed that the high school project would not commence until at least four years after the middle school project, resulting in significant inflationary costs. Another significant disadvantage of executing two separate projects is that each of the schools represents a single stand-alone building with a relatively small student population (compared to most middle and high schools), and does not justify MSBA support of many resources such as a full size auditorium and larger community use spaces. If the two schools are combined into a single co-located school (Like Options 1 through 3b) they form a larger facility with more MSBA support of such resources.

Option 7

- Project 1: Construct new Abington co-located Middle/High School for Grades 7-12 with PK.
- Project 2: Renovate/expand Beaver Brook Elementary School (Currently Grades 1-4) for use as K-4.
- Woodsdale Elementary School receives no work and continues as a Grades 5-6 school.
- Close the Center School (Currently Grades PK-K), as PK and K would be accommodated at the high school and Beaver Brook Elementary School respectively.
- Close the Frolio, as grades 7/8 would be accommodated at the co-located middle/high school.

This option is similar to options 1 and 2, except it defers dealing with the overcrowding in grades K-6 until the execution of a second project. The Town is only authorized (Through MSBA) for a single project, and would have to re-apply to the MSBA for the Beaver Brook Elementary School renovation and expansion. Such project would have to be approved/funded by the Town as a separate project, requiring separate Town Meeting and ballot election votes. There would obviously be some delay before the MSBA could consider the subsequent Beaver Brook project, and there is no guarantee when/if the project would be approved. For purposes of estimating the projected costs, it is assumed that the Beaver Brook Elementary School project would not commence until at least four years after the 7-12 middle/high school project.

This option requires that the Beaver Brook Elementary School be expanded in order to provide the additional space required to resolve PK-6 overcrowding. Such expansion triggers expensive regulatory compliance within the existing school which would not be necessary if the facility was not expanded. This results in a more expensive option that those identified in options 1 and 2.

Additionally, this option does not address all of the educational disadvantages identified in the educational visioning and educational programming documents with regard to maintaining a 7/8 middle school configuration. The continued existence of a 7/8 middle school configuration does not meet the middle school educational goals and priorities identified within these documents.

Option 7B

- Project 1: Renovate/modify existing Abington High School for use as a collocated Middle/ High School for Grades 7-12 with PK.
- Project 2: Renovate/expand Beaver Brook Elementary School (Currently Grades 1-4) for use as K-4.
- Woodsdale Elementary School receives no work and continues as a Grades 5-6 school.
- Close the Center School (Currently Grades PK-K), as PK and K would be accommodated at the high school and Beaver Brook Elementary School respectively.
- Close the Frolio, as grades 7/8 would be accommodated at the co-located middle/high school.

This option is similar to options 1B and 2B, except it defers dealing with the overcrowding in grades K-6 until the execution of a second project. The Town is only authorized (Through MSBA) for a single project, and would have to re-apply to the MSBA for the Beaver Brook Elementary School renovation and expansion. Such project would have to be approved/funded by the Town as a separate project, requiring separate Town Meeting and ballot election votes. There would obviously be some delay before the MSBA could consider the subsequent Beaver Brook project, and there is no guarantee when/if the project would be approved. For purposes of estimating the projected costs, it is assumed that the Beaver Brook Elementary School project would not commence until at least four years after the 7-12 middle/high school project.

This option requires that the Beaver Brook Elementary School be expanded in order to provide the additional space required to resolve PK-6 overcrowding. Such expansion triggers expensive regulatory compliance within the existing school which would not be necessary if the facility was not expanded. This results in a more expensive option that those identified in options 1B and 2B.

Additionally, this option does not address all of the educational disadvantages identified in the educational visioning and educational programming documents with regard to maintaining a 7/8 middle school configuration. The continued existence of a 7/8 middle school configuration does not meet the middle school educational goals and priorities identified within these documents.

Option 1: New 5-12 co-located middle/high school with Pre-K facilities on existing high school site

Option 1B: Renovation/expansion of existing Abington HS for use as 5-12 co-located middle/high school with Pre-K facilities on existing high school site

Option 2: New 6-12 co-located middle/high school with Pre-K facilities on existing high school site

Option 2B: Renovation/expansion of existing Abington HS for use as 6-12 co-located middle/high school with Pre-K facilities

Option 3

- Project 1: new 6-12 co-located middle/high school on existing high school site
- Project 2: renovation of Frolio MS for grades 4-5 elementary

Option 3B

- Project 1: renovation/expansion of existing Abington HS for use as 6-12 co-located middle/high school
- Project 2: renovation of Frolio MS for grades 4-5 elementary

Option 4

- Project 1: new Abington HS for grades 9-12
- Project 2: renovation/modification of existing Frolio MS for use as 7-8 middle school
- Project 3: renovation/expansion of Beaver Brook ES (grades 1-4) for use as PK-3
- Project 4: renovation/expansion of Woodsdale ES (grades 5-6) for grades 4-6. Close Center School.

Option 4B

- Project 1: renovation/modification of existing Abington HS for use as 9-12 high school
- Project 2: renovation/modification of existing Frolio MS for us as 7-8 middle school
- Project 3: renovation/expansion of Beaver Brook ES (grades 1-4) for use as PK-3
- Project 4: renovation/expansion of Woodsdale ES (grades 5-6) for grades 4-6

Option 5

- Project 1: new Abington HS for grades 9-12
- Project 2: renovation/expansion of Beaver Brook ES (grades 1-4) for use as PK-4
- Project 3: renovation/expansion of Woodsdale ES (grades 5-6) for grades 5-8. Close Center School and Frolio School.

Option 5B

- Project 1: renovation/modification of existing Abington HS for use as 9-12 high school
- Project 2: renovation/expansion of Beaver Brook ES (grades 1-4) for use as PK-4
- Project 3: renovation/expansion of Woodsdale ES (grades 5-6) for grades 5-8. Close Center School and Frolio School.

Option 6

- Project 1: new Abington MS for grades 5-8
- Project 2: new Abington HS for grades 9-12 (subsequent to completion/occupancy of new middle school)

Option 6B

- Project 1: new Abington MS for grades 5-8
- Project 2: renovation/expansion of existing Abington HS for grades 9-12 (subsequent to completion/occupancy of new middle school)

Option 7

- Project 1: new Abington co-located MS/HS for grades 7-12 with Pre-K
- Project 2: renovation/expansion of Beaver Brook ES (grades 1-4) for use as K-4

Option 7B

- Project 1: renovation/modification of existing Abington HS for use as co-located MS/HS for grades 7-12 with Pre-K
- Project 2: renovation/expansion of Beaver Brook ES (grades 1-4) for use as K-4

1	Major Milestones Timeline
2	Facilities Evaluation
3	Site Evaluations Summary
4	Educational Visioning Summary Document
5	Educational Programming Document
6	Introduction Document
7	Space Summary Documents
8	Options Considered Document
9	Evaluation Matrix
10	Draft of Cost Analysis Options
11	Cost of New School vs. Renovation Document
12	Review of Major Milestones

Option Selection Matrix - DRAFT 8.30.13	Option 1	Option 1B	Option 2	Option 2B	Option 3	Option 3B	Option 4	Option 4B	Option 5	Option 5B	Option 6	Option 6B	Option 7	Option 7B
Abington Public Schools, Abington, MA	Preferred													
Evaluation Criteria														
Does the option provide immediate and sustained overcrowding relief across all grade levels?	☑	☑												
Is the option Educationally Sound?	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑		
Does the option combine the school population in a manner which provides maximum space, amenities and MSBA reimbursement?	☑	☑	☑	☑	☑	☑							☑	☑
Does the option involve a single project which could be approved by MSBA and executed immediately without multiple (delayed) projects?	☑	☑	☑	☑										
Will the option have an immediate and recognizable impact on school communities?	☑	☑	☑	☑	☑	☑					☑	☑		
Does the option consolidate the building footprint at high school to maximize site resources and opportunities?	☑													
Does the option avoid negatively impacting the teaching and learning environments during construction/renovation?	☑		☑								☑		☑	
Is it the option economical compared to other options?	☑	☑	☑	☑										
Does the option include good long-term planning both educationally and financially?	☑	☑	☑	☑										
Does the option minimize the Towns financial exposure by avoiding inflation or future changes/unknowns?	☑	☑	☑	☑										
Does the option provide new 21st Century learning environments to all middle school and high school students?	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑		
Does the option consider MSBA current guidelines for maximizing reimbursement?	☑	☑	☑	☑	☑	☑							☑	☑
Does the option consolidate schools in an effort to create more efficiencies and close unecessary facilities?	☑	☑	☑	☑							☑	☑	☑	☑
Does the option improve grade level configurations, making for more efficient schools?	☑	☑	☑	☑							☑	☑		
Does the option include sufficient capacity to incorporate 5th Grade into Middle School for expanded educational opportunities?	☑	☑									☑	☑		
Does the option include sufficient capacity to expand full-day Kindergarten opportunities while simultaneously incorporating PK/K into other facilities, allowing for closing of Center School?	☑	☑									☑	☑	☑	☑
Does the option centralize school facilities?	☑	☑	☑	☑							☑	☑	☑	☑
Does the option avoid, or minimize modular space to relieve overcrowding?	☑	☑	☑	☑	☑	☑					☑	☑		
Does the option provide swing space to eliminate need for phased occupied construction?	☑		☑								☑			
Does the option avoid phased occupied construction?	☑		☑								☑			
Does the option minimize long term operational costs?	☑	☑	☑	☑							☑	☑	☑	☑
Does the option provide future 20 year expansion possibilities?	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑
Does the option provide parity/equality among the elementary schools?	☑	☑	☑	☑			☑	☑	☑	☑	☑	☑	☑	☑
Does the option include correcting building deficiencies at all schools?							☑	☑	☑	☑			☑	☑
Does the option sustain and/or expand playfield opportunities for the school and community?	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑			☑	☑
Does the option minimize perceieved traffic impacts?	☑	☑	☑	☑							☑	☑	☑	☑
TOTALS	25	21	21	18	8	8	6	6	6	6	16	13	12	11

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Abington Public Schools
Feasibility Study - Cost Options for Submittal to MSBA
08/30/2013

PROJECT BUDGET COMPARISONS (estimated)

		Option #1		Option #1B		Option #2		Option #2B		Option #3		Option #3B		Option #4		Option #4B		Option #5		Option #5B		Option #6		Option #6B		Option #7		Option #7B	
		New 5-12 co-located MS/HS with Pre-K		Reno/Add 5-12 co-located MS/HS with Pre-K		New 6-12 co-located MS/HS with Pre-K		Reno/Add 6-12 co-located MS/HS with Pre-K		New 6-12 co-located MS/HS		Reno/Add 6-12 co-located MS/HS		New 9-12 HS		Reno/Add 9-12 HS		New 9-12 HS		Reno/Add 9-12 HS		New 5-8 MS		New 5-8 MS		New 7-12 co-located MS/HS with Pre-K		Reno/Add 7-12 co-located MS/HS with Pre-K	
New Construction Square Footage		243,494		145,300		223,439		125,540		215,099		117,200		145,000		25,000		145,000		25,000		116,537		116,537		208,872		110,065	
Renovation Square Footage		0		111,831		0		111,831		0		111,831		0		111,831		0		111,831		0		0		0		111,831	
Number of 5-12 Pupils		1,115		1,115		945		945		945		945		450		450		450		450		450		450		770		770	
Number of Pre-Kindergarten Pupils		60		60		60		60		0		0		0		0		0		0		0		0		60		60	
Base Line MSBA Reimbursement Rate	(a)	55.63%		55.63%		55.63%		55.63%		55.63%		55.63%		55.63%		55.63%		55.63%		55.63%		55.63%		55.63%		55.63%		55.63%	
Description		Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%
New Construction Costs		$73,048,200.00	82%	$43,590,000.00	48%	$67,031,700.00	82%	$37,662,000.00	45%	$64,529,700.00	82%	$35,160,000.00	43%	$43,500,000.00	83%	$7,500,000.00	16%	$43,500,000.00	83%	$7,500,000.00	16%	$34,961,100.00	83%	$34,961,100.00	83%	$62,661,600.00	83%	$33,019,500.00	42%
Renovation Construction Costs		$0.00	0%	$30,753,525.00	34%	$0.00	0%	$30,753,525.00	37%	$0.00	0%	$30,753,525.00	38%	$0.00	0%	$30,753,525.00	65%	$0.00	0%	$30,753,525.00	65%	$0.00	0%	$0.00	0%	$0.00	0%	$30,753,525.00	39%
Furniture, Equipment & Technology		$2,820,000.00	3%	$2,820,000.00	3%	$2,412,000.00	3%	$2,412,000.00	3%	$2,268,000.00	3%	$2,268,000.00	3%	$1,080,000.00	2%	$1,080,000.00	2%	$1,080,000.00	2%	$1,080,000.00	2%	$1,080,000.00	3%	$1,080,000.00	3%	$1,992,000.00	3%	$1,992,000.00	3%
Architecture & Engineering Fees		$5,843,856.00	7%	$5,947,482.00	6%	$5,362,536.00	7%	$5,473,242.00	7%	$5,162,376.00	7%	$5,273,082.00	7%	$3,480,000.00	7%	$3,060,282.00	6%	$3,480,000.00	7%	$3,060,282.00	6%	$2,796,888.00	7%	$2,796,888.00	7%	$5,012,928.00	7%	$5,101,842.00	7%
Owner's Project Manager Fees		$1,826,205.00	2%	$1,858,588.13	2%	$1,675,792.50	2%	$1,710,388.13	2%	$1,613,242.50	2%	$1,647,838.13	2%	$1,087,500.00	2%	$956,338.13	2%	$1,087,500.00	2%	$956,338.13	2%	$874,027.50	2%	$874,027.50	2%	$1,566,540.00	2%	$1,594,325.63	2%
Misc. Project Costs		$913,102.50	1%	$929,294.06	1%	$837,896.25	1%	$855,194.06	1%	$806,621.25	1%	$823,919.06	1%	$543,750.00	1%	$478,169.06	1%	$543,750.00	1%	$478,169.06	1%	$437,013.75	1%	$437,013.75	1%	$783,270.00	1%	$797,162.81	1%
Owner's Contingency		$730,482.00	1%	$820,319.06	1%	$670,317.00	1%	$761,039.06	1%	$645,297.00	1%	$736,019.06	1%	$435,000.00	1%	$459,419.06	1%	$435,000.00	1%	$459,419.06	1%	$349,611.00	1%	$349,611.00	1%	$626,616.00	1%	$714,614.06	1%
Construction Contingency		$3,652,410.00	4%	$4,793,549.63	5%	$3,351,585.00	4%	$4,497,149.63	5%	$3,226,485.00	4%	$4,372,049.63	5%	$2,175,000.00	4%	$2,989,049.63	6%	$2,175,000.00	4%	$2,989,049.63	6%	$1,748,055.00	4%	$1,748,055.00	4%	$3,133,080.00	4%	$4,265,024.63	5%
Total Project Costs (MSBA Reimbursement Eligible)	(b)	**$88,834,255.50**	100%	**$91,512,757.88**	100%	**$81,341,826.75**	100%	**$84,124,537.88**	100%	**$78,251,721.75**	100%	**$81,034,432.88**	100%	**$52,301,250.00**	100%	**$47,276,782.88**	100%	**$52,301,250.00**	100%	**$47,276,782.88**	100%	**$42,246,695.25**	100%	**$42,246,695.25**	100%	**$75,776,034.00**	100%	**$78,237,994.13**	100%
MSBA Cost Reimbursement (c=a*b)	(c)	($49,418,496.33)	-56%	($50,908,547.21)	-56%	($45,250,458.22)	-56%	($46,798,480.42)	-56%	($43,531,432.81)	-56%	($45,079,455.01)	-56%	($29,095,185.38)	-56%	($26,300,074.31)	-56%	($29,095,185.38)	-56%	($26,300,074.31)	-56%	($23,501,836.57)	-56%	($23,501,836.57)	-56%	($42,154,207.71)	-56%	($43,523,796.13)	-56%
Total (Eligible) Project Costs NOT Reimbursed by MSBA (d=b-c) which must be paid by Abington	(d)	**$39,415,759.17**	44%	**$40,604,210.67**	44%	**$36,091,368.53**	44%	**$37,326,057.46**	44%	**$34,720,288.94**	44%	**$35,954,977.87**	44%	**$23,206,064.63**	44%	**$20,976,708.56**	44%	**$23,206,064.63**	44%	**$20,976,708.56**	44%	**$18,744,858.68**	44%	**$18,744,858.68**	44%	**$33,621,826.29**	44%	**$34,714,197.99**	44%
Additional Project Costs NOT Reimbursed by MSBA																													
Site Resources > 8% Cap	(e)	$3,500,000.00		$3,500,000.00		$3,500,000.00		$3,500,000.00		$3,500,000.00		$3,500,000.00		$3,500,000.00		$3,500,000.00		$3,500,000.00		$3,500,000.00		$0.00		$0.00		$3,500,000.00		$3,500,000.00	
Furniture, Equipment & Technology	(f)	$1,410,000.00		$1,410,000.00		$1,206,000.00		$1,206,000.00		$1,134,000.00		$1,134,000.00		$540,000.00		$540,000.00		$540,000.00		$540,000.00		$540,000.00		$540,000.00		$996,000.00		$996,000.00	
Total Additional Project Costs NOT Reimbursed by MSBA (g=e+f)	(g)	**$4,910,000.00**		**$4,910,000.00**		**$4,706,000.00**		**$4,706,000.00**		**$4,634,000.00**		**$4,634,000.00**		**$4,040,000.00**		**$4,040,000.00**		**$4,040,000.00**		**$4,040,000.00**		**$540,000.00**		**$540,000.00**		**$4,496,000.00**		**$4,496,000.00**	

		Renovated 4-5 Frolio		Renovated 4-5 Frolio		Renovated 7-8 Frolio		Renovated 7-8 Frolio		New 9-12 HS		Reno/Add 9-12 HS	
New Construction Square Footage		0		0		0		0		145,137		42,000	
Renovation Square Footage		51,729		51,729		51,729		51,729		0		111,831	
Number of Pupils		350		350		350		350		450		450	
Description		Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%
New Construction Costs		$0.00	0%	$0.00	0%	$0.00	0%	$0.00	0%	$43,541,100.00	77%	$12,600,000.00	22%
Renovation Construction Costs		$14,225,475.00	77%	$14,225,475.00	77%	$14,225,475.00	77%	$14,225,475.00	77%	$0.00	0%	$30,753,525.00	54%
Furniture, Equipment & Technology		$1,260,000.00	7%	$1,260,000.00	7%	$1,260,000.00	7%	$1,260,000.00	7%	$1,620,000.00	3%	$1,620,000.00	3%
Architecture & Engineering Fees		$1,138,038.00	6%	$1,138,038.00	6%	$1,138,038.00	6%	$1,138,038.00	6%	$3,483,288.00	6%	$3,468,282.00	6%
Owner's Project Manager Fees		$355,636.88	2%	$355,636.88	2%	$355,636.88	2%	$355,636.88	2%	$1,088,527.50	2%	$1,083,838.13	2%
Misc. Project Costs		$177,818.44	1%	$177,818.44	1%	$177,818.44	1%	$177,818.44	1%	$544,263.75	1%	$541,919.06	1%
Owner's Contingency		$177,818.44	1%	$177,818.44	1%	$177,818.44	1%	$177,818.44	1%	$435,411.00	1%	$510,419.06	1%
Construction Contingency		$1,209,165.38	7%	$1,209,165.38	7%	$1,209,165.38	7%	$1,209,165.38	7%	$2,177,055.00	4%	$3,244,049.63	6%
Site Resources > 8% Cap		$0.00	0%	$0.00	0%	$0.00	0%	$0.00	0%	$3,500,000.00	6%	$3,500,000.00	6%
SUBTOTAL PROJECT COST		$18,543,952.13	100%	$18,543,952.13	100%	$18,543,952.13	100%	$18,543,952.13	100%	$56,389,645.25	100%	$57,322,032.88	100%
Inflation for Years of Delay		$3,996,337.58	(4 years)	$3,996,337.58	(4 years)	$3,996,337.58	(4 years)	$3,996,337.58	(4 years)	$8,888,417.83	(3 years)	$9,035,385.43	(3 years)
TOTAL PROJECT COST (NOT reimbursed by MSBA)	(h)	**$22,540,289.71**		**$22,540,289.71**		**$22,540,289.71**		**$22,540,289.71**		**$65,278,063.08**		**$66,357,418.31**	

		Reno/Add BBES PK-3 and Woodsdale 4-6		Reno/Add BBES PK-3 and Woodsdale 4-6		Reno/Add BBES PK-4 and Woodsdale 5-8		Reno/Add BBES PK-4 and Woodsdale 5-8		Reno/Add BBES PK-4 and Woodsdale 5/6 no work		Reno/Add BBES PK-4 and Woodsdale 5/6 no work	
New Construction Square Footage		60,000		60,000		80,000		80,000		63,830		63,830	
Renovation Square Footage		123,000		123,000		123,000		123,000		67,000		67,000	
Number of Pupils		1,140		1,140		1,310		1,310		815		815	
Description		Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%
New Construction Costs		$18,000,000.00	27%	$18,000,000.00	27%	$24,000,000.00	32%	$24,000,000.00	32%	$19,149,000.00	40%	$19,149,000.00	40%
Renovation Construction Costs		$33,825,000.00	51%	$33,825,000.00	51%	$33,825,000.00	46%	$33,825,000.00	46%	$18,425,000.00	38%	$18,425,000.00	38%
Furniture, Equipment & Technology		$4,104,000.00	6%	$4,104,000.00	6%	$4,716,000.00	6%	$4,716,000.00	6%	$2,934,000.00	6%	$2,934,000.00	6%
Architecture & Engineering Fees		$4,146,000.00	6%	$4,146,000.00	6%	$4,626,000.00	6%	$4,626,000.00	6%	$3,005,920.00	6%	$3,005,920.00	6%
Owner's Project Manager Fees		$1,295,625.00	2%	$1,295,625.00	2%	$1,445,625.00	2%	$1,445,625.00	2%	$939,350.00	2%	$939,350.00	2%
Misc. Project Costs		$647,812.50	1%	$647,812.50	1%	$722,812.50	1%	$722,812.50	1%	$469,675.00	1%	$469,675.00	1%
Owner's Contingency		$602,812.50	1%	$602,812.50	1%	$662,812.50	1%	$662,812.50	1%	$421,802.50	1%	$421,802.50	1%
Construction Contingency		$3,775,125.00	6%	$3,775,125.00	6%	$4,075,125.00	6%	$4,075,125.00	6%	$2,523,575.00	5%	$2,523,575.00	5%
Site Resources > 8% Cap		$0.00	0%	$0.00	0%	$0.00	0%	$0.00	0%	$0.00	0%	$0.00	0%
SUBTOTAL PROJECT COST		$66,396,375.00	100%	$66,396,375.00	100%	$74,073,375.00	100%	$74,073,375.00	100%	$47,868,322.50	100%	$47,868,322.50	100%
Inflation for Years of Delay		$27,029,992.33	(7 years)	$27,029,992.33	(7 years)	$15,963,275.27	(4 years)	$15,963,275.27	(4 years)	$10,315,922.68	(4 years)	$10,315,922.68	(4 years)
TOTAL PROJECT COST (NOT reimbursed by MSBA)	(i)	**$93,426,367.33**		**$93,426,367.33**		**$90,036,650.27**		**$90,036,650.27**		**$58,184,245.18**		**$58,184,245.18**	

Total Cost to Town of Abington (j=d+g+h+i)	(j)	**$44,325,759.17**		**$45,514,210.67**		**$40,797,368.53**		**$42,032,057.46**		**$61,894,578.65**		**$63,129,267.57**		**$143,212,721.66**		**$140,983,365.59**		**$117,282,714.90**		**$115,053,358.83**		**$84,562,921.76**		**$85,642,276.99**		**$96,302,071.46**		**$97,394,443.17**	
Anticipated Additional MSBA Reimbursement (k=b*3%)	(k)	($2,665,027.67)		($2,745,382.74)		($2,440,254.80)		($2,523,736.14)		($2,347,551.65)		($2,431,032.99)		($1,569,037.50)		($1,418,303.49)		($1,569,037.50)		($1,418,303.49)		($1,267,400.86)		($1,267,400.86)		($2,273,281.02)		($2,347,139.82)	
Total Cost to Town of Abington after Additional Reimbursement (l=j-k)	(l)	**$41,660,731.50**		**$42,768,827.93**		**$38,357,113.73**		**$39,508,321.32**		**$59,547,027.00**		**$60,698,234.59**		**$141,643,684.16**		**$139,565,062.11**		**$115,713,677.40**		**$113,635,055.35**		**$83,295,520.91**		**$84,374,876.13**		**$94,028,790.44**		**$95,047,303.35**	

SUMMARY:																											
Total Cost of Option (m=b+g+h+i)	(m)	$93,744,255.50	100%	$96,422,757.88	100%	$86,047,826.75	100%	$88,830,537.88	100%	$105,426,011.46	100%	$108,208,722.58	100%	$172,307,907.03	100%	$167,283,439.91	100%	$146,377,900.27	100%	$141,353,433.15	100%	$108,064,758.33	100%	$109,144,113.56	100%	$138,456,279.18	100%	$140,918,239.30	100%
Less estimated MSBA grand funding (n=c+k)	(n)	($52,083,524.00)	-56%	($53,653,929.94)	-56%	($47,690,713.02)	-56%	($49,322,216.56)	-56%	($45,878,984.46)	-56%	($47,510,487.99)	-56%	($30,664,222.88)	-56%	($27,718,377.80)	-56%	($30,664,222.88)	-56%	($27,718,377.80)	-56%	($24,769,237.43)	-56%	($24,769,237.43)	-56%	($44,427,488.73)	-56%	($45,870,935.96)	-56%
Estimated Total Cost to Town of Abington		**$41,660,731.50**	44%	**$42,768,827.93**	44%	**$38,357,113.73**	44%	**$39,508,321.32**	44%	**$59,547,027.00**	44%	**$60,698,234.59**	44%	**$141,643,684.16**	44%	**$139,565,062.11**	44%	**$115,713,677.40**	44%	**$113,635,055.35**	44%	**$83,295,520.91**	44%	**$84,374,876.13**	44%	**$94,028,790.44**	44%	**$95,047,303.35**	44%

Costs included herein are for preliminary budget purposes only and are based on available data. They are calculated on a cost/sf basis utilizing the MSBA database of recent projects.

Preliminary Evaluation of Alternatives

base repair option

The Base Repair Option is **NOT** intended to be a viable solution for the Town of Abington. It does not resolve the overcrowding or educational deficiencies within the Abington Public School system. It does not provide any additional or new educational space, and does not modernize any existing educational space. It does not provide new instructional technology, needed programs, expanded community resources, or many of the educational and community benefits inherent in a viable solution.

The Base Repair Option **IS** intended to identify the significant expenditures required to resolve basic infrastructure, accessibility, and code compliance issues within the middle school and high school facilities over the next several years. It is intended to demonstrate that it would be much more fiscally responsible to address the comprehensive needs of the Abington Public School system with a viable solution that includes MSBA grant reimbursement funding, than it would to proceed with unreimbursed (no grant funding) capital expenditures for base repairs over the next several years. The MSBA requires that a Base Repair option be evaluated in order to compare it to viable options which address the comprehensive needs of the district. In the case of Abington, the significant cost of the Base Repair Option makes it obvious that the Town of Abington has managed to keep its school buildings in service for a very long time (1936 Frolio and 1962 High School), but now significant infrastructure, accessibility, and code compliance issues must be addressed.

Frolio Middle School

Base Repair Option

	BASE REPAIR OPTION Existing 1936 Building: 51,729 sf Minimal Reno - Code and Regulatory compliance only		
	51,729 sf		Major systems requiring replacement
Cost/SF	Cost		Comments
Sitework	$625,000.00		MA Accessibility compliance on parking, sidewalks, field access, building entries
			All major building entries require significant madifications, as they are half-floor above outside grade.
			All exterior site features utilized by the school (including stadium and stadium bleachers) are non-compliant and are assumed to require compliance as part of any renovations.
Phasing			Work must be conducted during unoccupied periods
General Conditions	$590,000.00		General Conditions, overhead, profit
Demolition	$175,000.00		Selective demolition for access to replacement of building systems. ADA/MAB modifications to door entries, corridors, toilets
Asbestos Removal	$145,000.00		contained selective abatement at disturbed areas
Lead Removal	$25,000.00		contained selective abatement at exterior windows
Concrete	$65,000.00		sidewalk/entry/ramping/bleacher replacement/ modifications
Masonry	$150,000.00		Masonry repointing and repair at exterior (not comprehensive, repair only). Masonry modification to interior door openings ADA/ MAB compliance
Structural Steel	$175,000.00		Seismic modifications at building interior. Ramp and lift structure modifications
Lightgage Framing	$35,000.00		
Misc. Metals	$30,000.00		Exterior lintel reinforcement @ windows and louvers
Stair	$40,000.00		ADA/MAB compliance on stairs and landings
Rough Carpentry	$25,000.00		misc. rough block'g at roof and elec./mech. modifications
Finish Carpentry	$25,000.00		Repairs at areas modified for accessibility
Waterproof/Sealants	$20,000.00		replace exterior sealants at joints
Insulation			
Roofing/Flashing	$360,000.00		Includes complete removal and replacement
Doors (Wood & HM)	$45,000.00		Interior doors, exterior doors & Fire rated doors required for compliance
Alum. Entrances	$35,000.00		Replace aluminum storefronts at entries
Alum. Windows	$670,000.00		Replacement of existing exterior windows
Door Hardware	$40,000.00		ADA/MAB compliance
Glass & Glazing	$30,000.00		Rated glass required at fire door assemblies
Drywall	$35,000.00		Interior modifications for ADA/MAB compliance. Restore selective demo areas where systems have been replaced.
Fire Proofing	$40,000.00		Repair of firewalls at existing building
Ceramic / Quarry Tile	$70,000.00		Repair at handicap toilet modifications
Acoustical Ceilings	$170,000.00		Full Replacement of existing ceiling system due to disturbance associated with systems replacement and non-compliant met-away tiles.
Acoustical Panels			
Wood Flooring			

	Cost/SF	Cost		Comments
Resilient Flooring		$20,000.00		Selective replacement where door entries have been modified for accessibility
Carpet				
Painting		$40,000.00		Patch/paint disturbed areas only
Theatrical Equipment				
Misc. Specialties		$28,000.00		Interior ADA signage
Food Service Equip.		$125,000.00		Some reconfiguration and equipment replacement required for code compliance
Gym Equipment				
Casework / Fixed		$145,000.00		ADA/MAB modifications to non-compliant cabinets, counters, casework
Assembly seating				
Bleachers		$35,000.00		ADA/AAB Compliance modifications at assembly areas
Elevator		$325,000.00		Elevator retrofit required; possibly in two locations.
Fire Protection		$175,000.00		Reconfiguration of existing system to meet current code compliance
Plumbing		$925,000.00		fixture replace, vacuum break, domestic upgrade, sanitary main replacement
HVAC		$1,650,000.00		replace non-compliant and deteriorated systems. Addition of automated controls
Electrical & Telecom.		$775,000.00		partial power, partial data, partial lighting, fire alarm replacement
Total Building cost	$139.92	$7,238,000.00		
Total Site cost	$12.08	$625,000.00		
Total Building & Site	$152.00	$7,863,000.00		
A/E Fees		$786,300.00		architectural and engineering design fees
Owner's Project Manager (OPM) fees		$235,890.00		Management of design and construction
Topographical survey		$15,000.00		For exterior modifications and design
Geotech investigation		$5,000.00		For exterior ramp and stair design
Permitting				
Move Management				
Owner admin. Costs		$15,000.00		
Printing / Advertising		$30,000.00		printing of bid documents and public advertising
Construction testing		$15,000.00		required independent testing during construction
Furniture & Equipment		$175,000.00		minimal amount of ADA/MAB compliant furniture
Technology		$225,000.00		security, phones, access controls for new ADA/ MAB doors and hardware
Project Contingency		$786,300.00		project and construction contingency
Project Management/Commissioning				
Total Project Cost	$196.24	$10,151,490.00		
MSBA Reimbursement	$0.00	$0.00		0%
Total Cost to Abington	$196.24	$10,151,490.00		

* Costs are derived from a database of Massachusetts Public School projects which were bid during the past three years. Two years of 5% inflation have been added to all costs to reflect the fact that projects would have to be staggered over a minimal two-year period.
* Costs do not include interest and other borrowing costs
* MSBA reimbursement is stated as zero, under the assumption that the above capital expenditures do not address many of the significant overcrowding and educational deficiencies and therefore would not qualify for MSBA reimbursement.

Abington High School

Base Repair Option

			BASE REPAIR OPTION Existing 1962 Building: 111,831 sf Minimal Reno - Code and Regulatory compliance only	
		111,831 sf	Major systems requiring replacement	
	Cost/SF	Cost		Comments
Sitework		$575,000.00		MA Accessibility compliance on parking, sidewalks, field access, building entries
				All major building entries require significant madifications, as they are half-floor above outside grade.
				All exterior site features utilized by the school (including stadium and stadium bleachers) are non-compliant and are assumed to require compliance as part of any renovations.
Phasing				Work must be conducted during unoccupied periods
General Conditions		$590,000.00		General Conditions, overhead, profit
Demolition		$240,000.00		Selective demolition for access to replacement of building systems. ADA/MAB modifications to door entries, corridors, toilets
Asbestos Removal		$195,000.00		contained selective abatement at disturbed areas
Lead Removal				
Concrete		$135,000.00		sidewalk/entry/ramping/bleacher replacement/ modifications
Masonry		$25,000.00		Minor masonry repointing and repair at exterior (not comprehensive, repair only). Masonry modification to interior door openings ADA/ MAB compliance
Structural Steel		$225,000.00		Seismic modifications at building interior. Ramp and lift structure modifications
Lightgage Framing		$50,000.00		Interior modifications for ADA/MAB compliance. Restore selective demo areas where systems have been replaced.
Misc. Metals				
Stair		$65,000.00		ADA/MAB compliance on stairs and landings
Rough Carpentry		$35,000.00		misc. rough block'g at roof and elec./mech. modifications
Finish Carpentry		$30,000.00		Repairs at areas modified for accessibility
Waterproof/Sealants		$10,000.00		replace exterior sealants at joints
Insulation				
Roofing/Flashing		$510,000.00		Includes complete removal and replacement
Doors (Wood & HM)		$65,000.00		Interior doors, exterior doors & Fire rated doors required for compliance
Alum. Entrances				
Alum. Windows				
Door Hardware		$65,000.00		ADA/MAB compliance
Glass & Glazing		$40,000.00		Rated glass required at fire door assemblies
Drywall		$75,000.00		Interior modifications for ADA/MAB compliance. Restore selective demo areas where systems have been replaced.
Fire Proofing		$80,000.00		Repair of firewalls at existing building
Ceramic / Quarry Tile		$110,000.00		Repair at handicap toilet modifications
Acoustical Ceilings		$170,000.00		Full Replacement of existing ceiling system due to installation of new utilities and fire protection system
Acoustical Panels				
Wood Flooring				

	Cost/SF	Cost		Comments
Resilient Flooring		$25,000.00		Selective replacement where door entries have been modified for accessibility
Carpet				
Painting		$65,000.00		Patch/paint disturbed areas only
Theatrical Equipment				
Misc. Specialties		$62,000.00		Interior ADA signage
Food Service Equip.		$90,000.00		Some reconfiguration and equipment replacement required for code compliance
Gym Equipment				
Casework / Fixed		$175,000.00		ADA/MAB modifications to non-compliant cabinets, counters, casework
Assembly seating				
Bleachers		$150,000.00		ADA/AAB Compliance modifications at assembly areas
Elevator		$450,000.00		Elevator retrofit required; possibly in two locations.
Fire Protection		$440,000.00		New fire protection (sprinkler) system to meet current code requirements
Plumbing		$1,150,000.00		fixture replace, vacuum break, domestic upgrade, sanitary main replacement
HVAC		$2,100,000.00		replace non-compliant and deteriorated systems. Addition of automated controls
Electrical & Telecom.		$1,250,000.00		partial power, partial data, partial lighting, fire alarm replacement
Total Building cost	$77.55	$8,672,000.00		
Total Site cost	$5.14	$575,000.00		
Total Building & Site	$82.69	$9,247,000.00		
A/E Fees		$924,700.00		architectural and engineering design fees
Owner's Project Manager (OPM) fees		$277,410.00		Management of design and construction
Topographical survey		$15,000.00		For exterior modifications and design
Geotech investigation		$5,000.00		For exterior ramp and stair design
Permitting				
Move Management				
Owner admin. Costs		$15,000.00		
Printing / Advertising		$30,000.00		printing of bid documents and public advertising
Construction testing		$15,000.00		required independent testing during construction
Furniture & Equipment		$225,000.00		minimal amount of ADA/MAB compliant furniture
Technology		$225,000.00		security, phones, access controls for new ADA/ MAB doors and hardware
Project Contingency		$924,700.00		project and construction contingency
Project Management/Commissioning				
Total Project Cost	$106.44	$11,903,810.00		
MSBA Reimbursement	$0.00	$0.00		0%
Total Cost to Abington	$106.44	$11,903,810.00		

* Costs are derived from a database of Massachusetts Public School projects which were bid during the past three years. Two years of 5% inflation have been added to all costs to reflect the fact that projects would have to be staggered over a minimal two-year period.
* Costs do not include interest and other borrowing costs
* MSBA reimbursement is stated as zero, under the assumption that the above capital expenditures do not address many of the significant overcrowding and educational deficiencies and therefore would not qualify for MSBA reimbursement.

1	Major Milestones Timeline
2	Facilities Evaluation
3	Site Evaluations Summary
4	Educational Visioning Summary Document
5	Educational Programming Document
6	Introduction Document
7	Space Summary Documents
8	Options Considered Document
9	Evaluation Matrix
10	Draft of Cost Analysis Options
11	Cost of New School vs. Renovation Document
12	Review of Major Milestones

Why does the renovation and expansion of an EXISTING SCHOOL sometimes cost about the SAME or MORE than the construction of a NEW SCHOOL ?

1. BASIC FACTS: The current Abington High School building is 111,831 square feet in size. The Frolio Middle School, built in 1937, is simply too old and too costly to renovate. Abington's School Feasibility Study has investigated several potential building sites, reviewed 12 different school building and grade reconfigurations, and researched the regulations of the Massachusetts School Building Authority to determine how Abington could solve system-wide education needs with only one building project, while also maximizing the amount of state grant money to help pay for school construction costs. The Study has shown that the most cost-effective and viable construction site would be at or adjacent to the existing Abington High School building on Gliniewicz Way. The Abington School Building Committee (ASBC) is still reviewing the pros and cons of several new school building alternatives, including but not limited to a new stand-alone Middle School (Grades 5-8 or 6-8) adjacent to the existing High School; a new Middle School wing to be added onto the High School, with significant renovations and upgrades to the High School; a new "co-located" Middle & High School Building (Grades 5-12 or 6-12) next to the existing AHS building (which would thereafter be razed), and several other alternatives.

2. BUILDING AGES: As of 2013, Abington High School (1963) is 50 years old; Woodsdale School (1958) is 55 years old; Beaver Brook Elementary School (1952) is 61 years old; North School and Center School (1939) are both 74 years old; and the Frolio Middle School (1937) is 76 years old. According to data compiled by the Massachusetts School Building Authority (MSBA), with an average school building age of 65 years, ***the Town of Abington is currently believed to have the oldest school buildings in all of Southeastern Massachusetts.***

3. ONE NEW BUILDING MAY BENEFIT ALL GRADE LEVELS: Each new school building alternative will create different benefits and effects on Abington's other school buildings and grade levels. For example, combining Grades 5-12 on Gliniewicz Way would allow the town to move Grades 3 & 4 into the Woodsdale School, use the Beaver Brook School for K-2, and thereafter close the North, Center and Frolio Schools for school uses (the townspeople could later decide if those closed schools should be sold or re-used for other town purposes). If only Grades 6-12 are located at a school on Gliniewicz Way, Grades 4 & 5 would use the Woodsdale School, Grades 1-3 would be located at Beaver Brook, and the Center School would have to remain open to house Kindergarten and Pre-School. Documentation for all 12 different school layout and grade re-configuration plans are available for review from the ASBC. In order to qualify for MSBA state grant funding, Abington's final school building proposal must demonstrate that it will resolve the educational planning, programming and space needs for the town for the next 50 years, or the MSBA will reject the plan and provide no project funding to Abington. Based on the knowledge gained from previous school projects in many other towns, and based on the actual size of Abington's existing school buildings and projected grade populations, Abington's Feasibility Study suggests that converting the existing Grade 9-12 High School site into a school serving Grades 6-12 or Grades 5-12 would likely (a) maximize the funding from the MSBA, (b) result in renovated or new classrooms for more grade levels, and (c) address the overcrowding and classroom size issues in all of our school buildings. If the town and the state were to approve the construction of a "co-located" Middle & High School Building (Grades 5-12 or 6-12) on Gliniewicz Way, such a building would maintain a High School for Grades 9-12, with a separate and

designated wing for Grades 7 & 8 and another separate area for Grades 5 & 6 (or a combined Grades 6-8 wing). Much of the common spaces, such as a cafeteria, gymnasium space, auditorium, school library, and administrative offices would be constructed between the High School classrooms and the 5-8 classrooms. This general design layout would assure that the older and younger Grades would be physically separated from each other, but would also allow the various common spaces to be utilized by different age groups at different times. The shared use of gyms, cafeterias, etc. among several Grade levels in one consolidated "co-located" school building will also strengthen the Abington's School Building Committee's efforts to qualify for increased reimbursement from the Massachusetts School Building Authority (MSBA), thus lowering Abington's share of the construction costs.

4. MIDDLE SCHOOL CONSTRUCTION: Addressing and correcting the problems created by the old age and old layout of our existing Frolio Middle School is our town's first priority. The Frolio School building must be replaced. To provide sufficient classroom space for Grades 5-8 (a true middle school), together with improvements to centralized common spaces, would require the construction of approximately 145,000 square feet of new floor space. Therefore, based on square footage calculations, if Abington elected to renovate the existing Abington High School and constructed an attached new Middle School wing (instead of constructing an entirely new Grade 5-12 building), the majority of Abington's school construction project would still constitute "new construction". The same finding would hold true if the Grade 6-12 school building alternative was selected, except that any additional desired improvements for other grades levels at the Woodsdale or Beaver Brook or Center Schools would require the town and state to fund a second and separate school construction project a few years later. The MSBA will not fund two separate construction projects on two separate building sites at the same time; the MSBA grant program promotes and rewards the cost-efficiencies created by encouraging the design and construction of a single school building project which provides benefits to the town's entire school system.

5. HIGH SCHOOL OR FROLIO SCHOOL RENOVATION: The Town is seeking reimbursement grant funding from the state (MSBA) in order to pay for approximately 55-60% of Abington's eventual school construction project. To qualify for state grant funding, towns must insure that any school renovation work will address all of the physical needs of the school, while also addressing the educational needs of the town's students. The MSBA sets minimum classroom sizes (and maximum sizes), must approve layout and configuration plans, and must confirm that the renovated spaces will actually serve the needs of the town for at least the next 50 years. Otherwise, no grant funding will be approved. Due to the age of Abington High School and the Frolio Middle School, the amount of renovation work which would be required under current law is extensive, and would constitute a "Comprehensive Renovation Project" at either site.

6. COMPREHENSIVE RENOVATION PROJECT: The renovation of commercial buildings and public buildings (such as schools) trigger much more extensive Code requirements than a typical home renovation project. State and federal laws, such as the Americans with Disabilities Act (ADA) regulations and fire safety regulations, require significantly more structural and mechanical upgrades for school renovation projects. A desire or need to change the layout of the Frolio School's or the High School's floor plan in order to meet current educational guidelines and standards would trigger a requirement to bring either or both of those school buildings within complete compliance with all

current Massachusetts Building Code regulations, all of the new State Energy Code requirements, all Massachusetts Architectural Access Board regulations (and federal ADA regulations), and all fire safety regulations. Once over 30% of the assessed value of a school building is renovated, state law then requires the ENTIRE building to be brought up to date with ALL applicable codes and regulations. In short, and as an example, the minimum renovations required to update either school building would require an upgrade or replacement of the entire roof, electrical wiring, plumbing and plumbing fixtures, the exterior building envelope and insulation, windows and doors, fire alarm and fire protection systems, interior stairways and doorways, elevators, all heating and air exchange systems, and building security systems. Obviously, to complete these upgrades, most every wall and ceiling in the building would have to be opened, removed and/or replaced – and somehow the building would have to remain partially functional and occupied for school purposes during these renovations.

7. ACCESSIBILITY REQUIREMENTS: Note that the "main floor" of Abington High School and the Frolio Middle School are actually constructed one half-story ABOVE the surrounding site grade. Presently, at the High School, after a visitor or student climbs up the five exterior granite steps at the main entrance, upon passing through the entrance doors, a visitor must then either go up or go down a flight of stairs to reach the main floor or the basement floor level. To conform with current accessibility laws, a renovation project at Abington High School would require major structural modifications to the building and perhaps its surrounding site so that visitors or students with disabilities could enter the building without encountering exterior or interior stairways. Similar structural modifications would be required at every exterior entrance door, and every classroom doorway, every counter height, every bookshelf, every elevator, and every bathroom; all of these building components would have to be reconstructed in order to comply with current ADA, Architectural Access Board (AAB) and Building Code guidelines. Alternative structural modifications which are intended to improve accessibility, but which do not provide 100% accessibility and full compliance with current regulations, would not be sufficient. A similar analysis holds true for the Frolio Middle School.

8. NEW ENERGY CODE REQUIREMENTS: The Commonwealth of Massachusetts has adopted an Energy Code which requires every building undergoing significant renovations to comply with a very high standard of energy efficiency. A renovation project at Abington High School and/or the Frolio Middle School would require the old boilers and heating system to be replaced, all lighting fixtures to be replaced, and the entire building envelope (walls, windows and roof) to be upgraded and reconstructed in order to comply with the recent changes to the state's Energy Code. Both school buildings would essentially have to be stripped down "to its bones" and then be reconstructed in accordance with today's Energy Code requirements.

9. HIDDEN HAZARDS: In any renovation project, there are unforeseen or "hidden" conditions which are discovered during the demolition phase of a project. These conditions generally result in additional expenditures, and the MSBA recommends that a "construction contingency" be added to project's budget in order to cover these (unknown but anticipated) costs. Although a project budget for "new construction" also requires a construction contingency amount, the industry standard and MSBA recommendation for a renovation project includes significantly higher contingency costs (and thus a higher budget) in order to cover these unforeseen or hidden conditions. For example, although the Town and its School Department has done an excellent job encapsulating or removing potentially friable asbestos in all of our school buildings, a Comprehensive Renovation Project might expose

latent hazards hidden within the building's old walls or ceiling structures (such as asbestos installed in the 1960's). If discovered, any hazardous materials would have to be completely removed from a school before it could be re-occupied, and the process of removing any hazardous materials would require portions of the building to be sealed off while classes were being held in other areas. If hazardous materials were exposed at any time during the renovation of the 50-year-old High School or the 76-year-old Frolio School, the abatement of those hazardous materials would generate significant additional costs -- and would also require the closing of portions of the building during the abatement work, thus resulting in potentially significant delays and cost increases to other portions of any planned renovation work.

10. INCREASED LABOR COSTS AND PROJECT COMPLETION TIME: The most expensive component of any building project is not the building materials – it is the cost of labor. Since the renovation or new construction of a school building would involve a public building, the Town would be required to pay "prevailing wage" (higher hourly wages set by state law) to all of the laborers involved with the project. Notably, the amount of labor hours required to complete a Comprehensive Renovation Project in an occupied high school is significantly greater than the time required to complete the construction of a new unoccupied building. For example, if the Town elected to renovate the High School building instead of opting for new construction, the renovation project would have to be broken into several phases over a much longer period of time (when compared to the shorter timetable for new construction). Similar to other local towns, if renovation is elected, the building would have to be renovated while it is occupied and used as an active high school. Abington does not have an alternative building which could temporarily house our high school student body and teachers. Therefore, for student safety, portions of the current AHS building will have to be cordoned off for renovation work from time to time, but this type of phased renovation project would significantly extend the expected completion time for the project. Renovations of an active, occupied school would also require many of the upgrades to building systems (electrical, plumbing, heating, etc.) to be installed in phases, with many temporary renovations being installed during construction in order to keep existing systems in operation while the newer systems were installed in piecemeal fashion. Time is money, and the time required to complete a school renovation project would prove to be much more expensive than the time required for new construction. ***Most every town which has recently completed a school construction project has reached the same conclusion, and has voted to proceed with the construction of a new school building as the more cost-efficient solution to their town's long-term needs.***

In sum, many of us are familiar with the costs and issues arising during the renovation of our homes or other private property. But the renovation of a large public building is dramatically different, due to heightened requirements for addressing accessibility, hazardous materials, building code compliance, energy code compliance, health/fire/safety regulations and the rigid enforcement of much higher standards. In the end, the laws and regulations which would apply to a renovation project at Abington's 50-year-old High School and/or the 76-year-old Frolio School would effectively require the Town to replace or reconstruct almost every light, plumbing fixture, door, doorway, window, roof, interior wall, exterior wall, electrical service, plumbing pipe, fire alarm system, boiler, heat system, toilet, sink, and stairwell in the school – and it will take longer to complete the reconstruction of the existing school than the time required to build a new 100% compliant school building to serve Abington's needs for at least the next fifty years.

1	Major Milestones Timeline
2	Facilities Evaluation
3	Site Evaluations Summary
4	Educational Visioning Summary Document
5	Educational Programming Document
6	Introduction Document
7	Space Summary Documents
8	Options Considered Document
9	Evaluation Matrix
10	Draft of Cost Analysis Options
11	Cost of New School vs. Renovation Document
12	Review of Major Milestones

Abington School District
Feasibility Study & Schematic Design
Major Submissions to MSBA
Town Actions and Approvals
Ai3 Architects, LLC
August 14, 2013

	Item	Task	Date
STEP 1		**Preliminary Design Program**	
		Educational Program	
		Initial Space Summary	
		Evaluation of Existing Conditions	
		Site Development Requirements	
		Preliminary Evaluation of Alternatives	
		Local Actions and Approvals (Joint School Committee / Board of Selectmen)	9/9/13
		Local Actions and Approvals (Building Committee Meeting)	9/19/13
		Date of Submission to MSBA	9/20/13
STEP 2		**Preferred Schematic Study and Report**	
		Final Evaluation of Existing Conditions	
		Final Evaluation of Alternatives	
		Preferred Solution	
		Local Actions and Approvals (School Committee / Building Committee / Board of Selectmen)	Week of 11/25/13
		Date of Submission to MSBA	12/2/13
STEP 3		**Schematic Design Submittal Requirements**	
		Final Design Program	
		Traffic Analysis	
		Environmental & Existing Building Assessment	
		Geotechnical & Geo-environmental Analysis	
		Utility Analysis & Soils Analysis for On-Site Septic/Sewage Treatment Facilities	
		Massing Study	
		Narrative Building Systems Description	
		LEED-S Documents	
		Compliance with ADA and MAAB	
		Anticipated Reimbursement Rate & Incentive Points	
		Total Project Budget	
		Designers Construction Cost Estimate	
		Project Schedule	
		Schematic Design Drawings	
		Local Actions and Approvals (School Committee / Building Committee / Board of Selectmen)	Week of 7/28/14
		Date of Submission to MSBA	8/11/14

MSBA Project Scope and Budget Meeting with Town	September 2014
MSBA Board of Directors Vote	October 2014
Abington Town Meeting and Debt Exclusion	within 120 days of MSBA B.O.D. vote